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COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF FORESTS AND WATERS

HARRISBURG

DIVISION OF HYDROGRAPHY

Stream Flow Records

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Prepared in Co-operation with the
United States Geological Survey

FOR THE YEAR

October 1, 1934, to September 30, 1935

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Stream Flow Records
of
Pennsylvania
for the Year
October 1, 1934 to September 30, 1935

This volume contains records for the year ending September 30, 1935. All stream flow records previous to and including those for 1911, were published in the Reports of the Water Supply Commission of Pennsylvania, 1910-11. For the years 1912 to 1921, they were published in the annual reports of the Water Supply Commission, with the records for 1917-18 and 1919-20 combined and issued in biennial form. Beginning with 1922, the records have been published by the Department of Forests and Waters, Division of Hydrography, in reports entitled, "Stream Flow Records of Pennsylvania." They were published annually with the exception of those for the four years 1929-32, which were issued in one volume. Prior to 1913 they were compiled and published for calendar years. The 1914 records were tabulated for the nine months, January to September. Subsequent records have been published for water years, October 1 to September 30.

Since June 1, 1931, the water resource investigations in Pennsylvania, including the collection of stream flow data, have been carried on under cooperative agreement with the Water Resources Branch of the United States Geological Survey.

STREAM GAGING

On October 1, 1934, the beginning of the 1935 water year, ninety-nine stream gaging stations were in operation. Three stations were discontinued during the year and two new ones were established, thus leaving ninety-eight stations in operation at the end of the year. The location and date of discontinuance of the stations are as follows:

Neshaminy Creek at Rushland, December 31, 1934.
Shenango River at New Castle, January 31, 1935.
North Bald Eagle Creek at Milesburg, May 31, 1935.

The location and date of establishment of the new stations during the year are as follows:

Neshaminy Creek near Langhorne, October 1, 1934.
Tohickon Creek near Pipersville, June 5, 1935.

The newly established stations were provided with wells, shelters, and water-stage recorders, making a total of fifty-four stations supplied with recorder equipment in the State.

This volume contains data for one hundred and eight stations, as shown by the tables and the map on pages 20-23. The records for the four stations on the Delaware River, two stations in the Potomac River Basin, and one station in the Monongahela River Basin were furnished by the New York, New Jersey, and Washington Offices of the United State Geological Survey. Descriptions of stations, tables of daily and monthly discharge, summary of run-off in second-feet per square mile, run-off depth in inches, precipitation, and per cent run-off to precipitation are given for ninety-six gaging stations having a satisfactory rating. Descriptions of stations and daily mean gage heights are published for four base stations operated in the Susquehanna River Basin for flood warning purposes.

The records for Neshaminy Creek at Rushland, in the Delaware River Basin, for the three months, October to December 1934, were published with the stream flow records for the year ending September 30, 1934.

In the Susquehanna River Basin, the station ratings do not justify the determination of discharge for North Bald Eagle Creek at Milesburg and Upper Little Swatara Creek at Pine Grove. The results of the current meter discharge measurements at these stations are published in the table of miscellaneous discharge measurements on page 132.

In the Ohio River Basin, the accuracy of the data collected for Chartiers Creek at Carnegie does not warrant the publication of the record, and the regulating operations at Pymatuning Dam make it impossible to accurately determine the discharge for the Shenango River at New Castle in the absence of a water-stage recorder record. The results of the current meter discharge measurements for these stations are also published in the table of miscellaneous discharge measurements on page 132.

Daily gage heights for the Kiskiminetas River at Vandergrift are not published. The data collected for the stations that do not have records published in this report can be obtained upon request to the Department of Forests and Waters, Division of Hydrography, Harrisburg, Pennsylvania.

For stations where the maximum discharge has not been determined and published, a probable estimate can be furnished. Any other information that may be of importance to the engineer making application of these gaging-station records may also be obtained upon request to the Department of Forests and Waters, Division of Hydrography, Harrisburg, Pennsylvania.

The flow in the principal drainage basins of the State, for the year ending September 30, 1935, as determined from the total discharge of the Delaware River at Riegelsville, Susquehanna River at Harrisburg, Allegheny River at Kittanning, and Youghiogheny River at Connellsville, which drain a total area of 40,776 square miles, equivalent to an

area of 90.4 per cent of the total area of Pennsylvania, was 1.2 per cent below the mean flow for the 26 years 1910-35.

In the Delaware River, the flow for the 1935 water year was 4.9 per cent above the mean flow for the 26 years 1910-35. The flow in the Susquehanna River was 4.4 per cent above the average flow for 26 years, while the combined discharge of the Allegheny and Youghiogheny Rivers was 14.8 per cent below the mean for the same period.

With but few exceptions, the high flows during the year in the Delaware River Basin and North Branch of Susquehanna River drainage area were in July. In other parts of the State the high flows were scattered through five other months in the year. The low flows during the year, in the Delaware and Susquehanna River Basins, were in September; while in the Ohio River drainage basin, they were in October, June, and July. In general, the streams were not seriously affected by ice during the winter months.

FLOOD WARNING

The Flood Warning Service was continued in the Susquehanna Basin throughout the year. There were unusually high stages in the North Branch of Susquehanna River in July. Information relating to increases in stream flow was furnished on several occasions to individuals, municipalities, and commercial and recreational interests.

PRECIPITATION

Thirty-eight rainfall stations are maintained by the Department of Forests and Waters. Prior to 1920 the Water Supply Commission of Pennsylvania published precipitation records in its annual reports. Since that time, with the exception of a few cases where stations are located in close proximity to others, these records may be found in the monthly and annual reports of the United States Weather Bureau. Records for stations not published by the Weather Bureau are available at the office of the Department of Forests and Waters, Division of Hydrography, Harrisburg, Pennsylvania.

The average precipitation for the State during the year ending September 30, 1935, as deducted from the observations at 141 well-distributed stations, was 38.82 inches, a deficiency of 3.30 inches as compared with the average, which was computed from the 48 years of record 1888 to 1935.

The yearly totals ranged from a minimum of 28.66 inches at Bellefonte, Centre County, to a maximum of 53.02 inches at Dalton Run, Somerset County. The monthly records ranged from 1.71 inches below the normal in October to 1.32 inches above the 48-year average in July as shown in the following table.

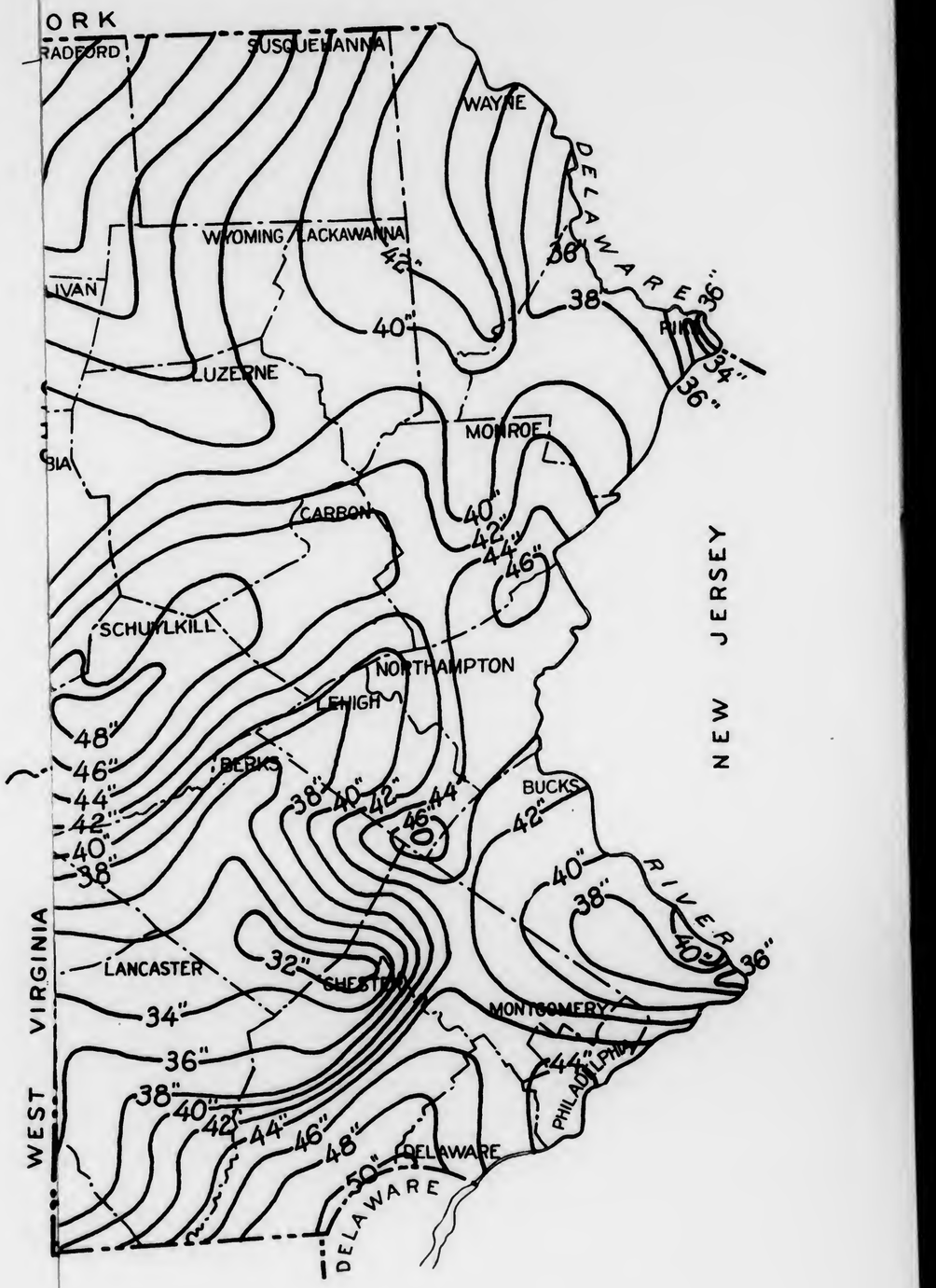
PRECIPITATION ON PENNSYLVANIA FOR THE YEAR ENDING SEPTEMBER 30, 1935

Month	Precipitation in inches	
	48-year Average	1934-35
October	3.17	1.46
November	2.84	3.61
December	3.12	2.55
January	3.20	3.08
February	2.87	2.67
March	3.47	2.62
April	3.40	2.56
May	3.92	3.00
June	4.10	4.22
July	4.31	5.63
August	4.22	3.91
September	3.50	3.51
The Year	42.12	38.82

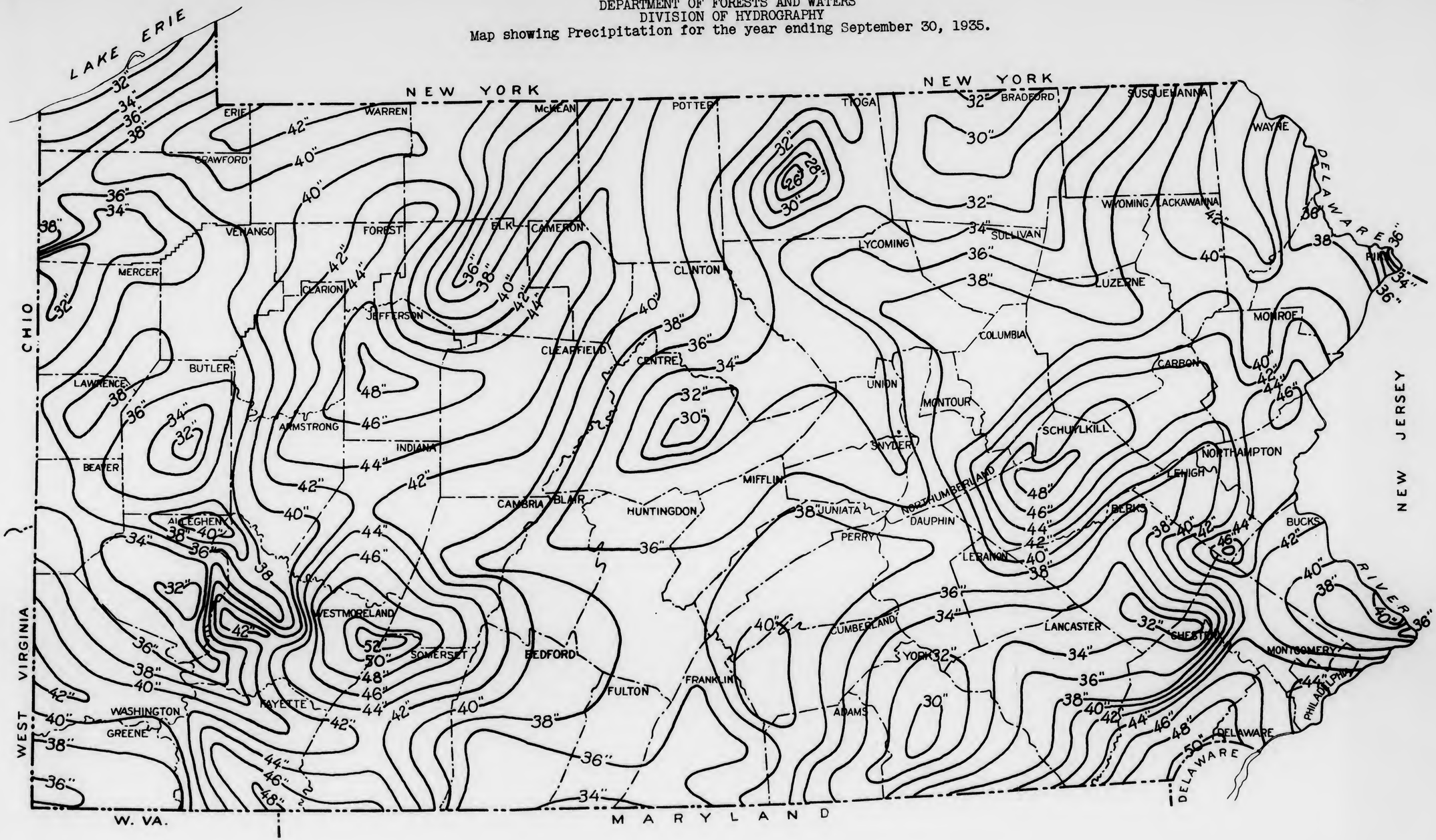
The distribution of precipitation on Pennsylvania during the year ending September 30, 1935, is shown on the following map.

As deducted from the 173 precipitation stations used by the Division of Hydrography in determining the per cent run-off to precipitation at gaging stations, the average precipitation was about 42 inches on the Delaware River Basin, 37 inches on the Susquehanna River Basin, and 39.7 inches on the Ohio River Basin. The excessive amount on the Delaware River Basin was largely due to the coastal storm in July.

A monthly and yearly tabulation of precipitation on Pennsylvania for the 48 years ending September 30, 1935 may be found on page 138.



DEPARTMENT OF FORESTS AND WATERS
DIVISION OF HYDROGRAPHY
Map showing Precipitation for the year ending September 30, 1935.



STREAM FLOW RECORDS

DEFINITIONS OF TERMS

The volume of water flowing in a stream—the "run-off" or "discharge"—is expressed in various terms, each of which has become associated with a certain class of work. These terms may be divided into two groups—(1) those that represent a rate of flow, as second-feet, gallons per minute, and discharge in second-feet per square mile, and (2) those that represent the actual quantity of water, as run-off in inches, acre-feet and millions of cubic feet. The principal terms used in this series of reports are second-feet, second-feet per square mile, and run-off in inches. They may be defined as follows:

"Second-feet" is an abbreviation for "cubic feet per second." A second-foot is the rate of discharge of water flowing in a channel of rectangular cross section 1 foot wide and 1 foot deep at an average velocity of 1 foot per second. It is generally used as a fundamental unit from which others are computed.

"Second-feet per square mile" is the average number of cubic feet of water flowing per second from each square mile of area drained, on the assumption that the run-off is distributed uniformly both as regards time and area.

"Run-off in inches" is the depth to which an area would be covered if all the water flowing from it in a given period were uniformly distributed on the surface. It is used for comparing run-off with rainfall, which is usually expressed in inches.

An "acre-foot" is equivalent to 43,560 cubic feet and is the quantity required to cover an acre to the depth of 1 foot. The term is commonly used in connection with storage and irrigation.

The following terms not in common use are here defined:

"Stage-discharge relation"—an abbreviation for the term "relation of gage height to discharge."

"Control"—a term used to designate the natural section or stretch of the channel or artificial structure below the gage which determines the stage-discharge relation at the gage.

CONVERSION TABLES

The following tables afford a ready means of conversion between the terms in common use in hydraulic computations.

Discharge in second-feet per square mile into run-off in depth in inches

Discharge (second-feet per square mile)	Run-off (depth in inches)				
	1 day	28 days	29 days	30 days	31 days
1	0.03719	1.041	1.079	1.116	1.153
2	.07438	2.083	2.157	2.231	2.306
3	.11157	3.124	3.236	3.347	3.459
4	.14876	4.165	4.314	4.463	4.612
5	.18595	5.207	5.393	5.578	5.764
6	.22314	6.248	6.471	6.694	6.917
7	.26033	7.289	7.550	7.810	8.070
8	.29752	8.331	8.628	8.926	9.223
9	.33471	9.372	9.707	10.041	10.376

Note—For part of a month multiply the run-off for 1 day by the number of days.

Discharge in second-feet into run-off in acre-feet

Discharge (second-feet)	Run-off (acre-feet)				
	1 day	28 days	29 days	30 days	31 days
1	1.983	55.54	57.52	59.50	61.49
2	3.967	111.1	115.0	119.0	123.0
3	5.950	166.6	172.6	178.5	184.5
4	7.934	222.1	230.1	238.0	246.0
5	9.917	277.7	287.6	297.5	307.4
6	11.90	333.2	345.1	357.0	368.9
7	13.88	388.8	402.6	416.5	430.4
8	15.87	444.3	460.2	476.0	491.9
9	17.85	499.8	517.7	535.5	553.4

Note—For part of a month multiply the run-off for 1 day by the number of days.

Discharge in second-feet into run-off in millions of cubic feet

Discharge (second-feet)	Run-off (millions of cubic feet)				
	1 day	28 days	29 days	30 days	31 days
1	0.0864	2.419	2.506	2.592	2.678
2	.1728	4.838	5.012	5.184	5.356
3	.2592	7.257	7.518	7.776	8.034
4	.3456	9.676	10.02	10.37	10.71
5	.4320	12.10	12.53	12.96	13.39
6	.5184	14.51	15.04	15.55	16.07
7	.6048	16.93	17.54	18.14	18.75
8	.6912	19.35	20.05	20.74	21.42
9	.7776	21.77	22.55	23.33	24.10

Note—For part of a month multiply the run-off for 1 day by the number of days.

Discharge in second-feet into run-off in millions of gallons

Discharge (second-feet)	Run-off (millions of gallons)				
	1 day	28 days	29 days	30 days	31 days
1	0.6463	18.10	18.74	19.39	20.04
2	1.293	36.20	37.48	38.78	40.08
3	1.939	54.30	56.22	58.17	60.12
4	2.585	72.40	74.96	77.56	80.16
5	3.232	90.50	93.70	96.95	100.2
6	3.878	108.6	112.4	116.3	120.2
7	4.524	126.7	131.2	135.7	140.3
8	5.170	144.8	149.9	155.1	160.3
9	5.817	162.9	168.7	174.5	180.4

Note—For part of a month multiply the run-off for 1 day by the number of days.

Velocity in feet per second into velocity in miles per hour

(1 foot per second=0.681818 mile per hour, or very nearly two-thirds mile per hour; 1 mile per hour=1.46666 feet per second. In computing the table the values 0.68182 and 1.4667 were used).

Feet per second (units)	Miles per hour for tenths of foot per second									
	0	1	2	3	4	5	6	7	8	9
0	0.000	0.068	0.136	0.205	0.273	0.341	0.409	0.477	0.545	0.614
1	.682	.750	.818	.886	.995	1.02	1.09	1.16	1.23	1.30
2	1.36	1.43	1.50	1.57	1.64	1.70	1.77	1.84	1.91	1.98
3	2.05	2.11	2.18	2.25	2.32	2.39	2.45	2.52	2.59	2.66
4	2.73	2.80	2.86	2.93	3.00	3.07	3.14	3.20	3.27	3.34
5	3.41	3.48	3.55	3.61	3.68	3.75	3.82	3.89	3.95	4.02
6	4.09	4.16	4.23	4.30	4.36	4.43	4.50	4.57	4.64	4.70
7	4.77	4.84	4.91	4.98	5.05	5.11	5.18	5.25	5.32	5.39
8	5.45	5.52	5.59	5.66	5.73	5.80	5.86	5.93	6.00	6.07
9	6.14	6.20	6.27	6.34	6.41	6.48	6.55	6.61	6.68	6.75

CONVENIENT EQUIVALENTS

LENGTH

1 inch=1/12 foot=0.027778 yard=0.000015783 mile=2.54 centimeters.
1 foot=12 inches=1/3 yard=0.00018939 mile=0.3048 meter.
1 yard=36 inches=3 feet=0.00056818 mile=0.9144 meter.
1 mile=63.360 inches=5,280 feet=1,760 yards=1.60935 kilometers.
1 meter=100 centimeters=0.001 kilometer=39.37 inches=3.2808 feet=1.0936 yards=0.00062137 mile.

SURFACE

1 square inch=0.006944 square foot=0.0007716 square yard=0.0000001594 acre=0.0000000002491 square mile=6.45163 square centimeters.
1 square foot=144 square inches=1/9 square yard=0.000022957 acre=0.00000003587 square mile=0.092903 square meter.
1 square yard=1,296 square inches=9 square feet=0.0002066 acre=0.0000003228 square mile =0.83613 square meter.
1 acre=6,272,640 square inches=43,560 square feet=4,840 square yards=0.0015625 square mile =208.71 feet square=0.404687 hectare.
1 square mile=4,014,489,000 square inches=27,878,400 square feet=3,097,600 square yards= 640 acres=259 hectares.
1 square meter=10,000 square centimeters=0.0001 hectare=0.000001 square kilometer=1,550 square inches=10.7639 square feet=1.19598 square yards=0.0002471 acre= 0.0000003861 square mile.

VOLUME

1 cubic inch=0.004329 United States gallon=0.0005787 cubic foot=16.3872 cubic centimeters.
1 United States gallon=231 cubic inches=0.13368 cubic foot=0.00000307 acre foot=3.78543 liters.
1 cubic foot=1,728 cubic inches=7.4805 United States gallons=0.037037 cubic yards= 0.000022957 acre-foot=28.317 liters.
1 cubic yard=46,656 cubic inches=27 cubic feet=0.00061983 acre-foot=0.76456 cubic meter.
1 acre-foot=325,851 United States gallons=43,560 cubic feet=1,613 1/3 cubic yards=1,233.49 cubic meters.
1 cubic meter, stere, or kiloliter=1,000,000 cubic centimeters=1,000 liters=61,023.4 cubic inches=264.17 United States gallons=35.3145 cubic feet=1.30794 cubic yards= 0.00081708 acre-foot.

HYDRAULICS

1 United States gallon of water weighs 8.34 pounds avoirdupois.
1 cubic foot of water weighs 62.5 pounds avoirdupois.
1 second-foot=7.48 United States gallons per second=448.8 United States gallons per minute =26,929.9 United States gallons per hour=646,317 United States gallons per day.
1 second-foot=60 cubic feet per minute=3,600 cubic feet per hour=86,400 cubic feet per day =31,536,000 cubic feet per year=0.000214 cubic mile per year.
1 second-foot=0.9917 acre-inch per hour=1.983471 acre-feet per day=723,966942 acre-feet per year.
1 second-foot=0.028317 cubic meter per second=1.699 cubic meters per minute=101.941 cubic meters per hour=2,446.58 cubic meters per day.
1 second-foot for 1 year (365 days) will cover 1 square mile 1.1312 feet or 13.5744 inches deep.
1 second-foot falling 10 feet=1.135 horsepower.
100 United States gallons per minute=0.223 second-foot=0.442 acre-foot in one day.
1 million gallons per day=1.55 second-feet=3.07 acre-feet per day=2.629 cubic meters per minute.
1 million gallons per month=0.05525 second-feet for one 28-day month=0.05334 second-foot for one 29-day month=0.05157 second-foot for one 30-day month=0.04990 second-foot for one 31-day month.
1,000,000,000 (1 United States billion) cubic feet=11,570 second-feet for one day=413 second-feet for one 28-day month=399 second-feet for one 29-day month=386 second-feet for one 30-day month=373 second-feet for one 31-day month.
1 horsepower=1 second-foot falling 8.8 feet.
1 horsepower=1 second-foot falling 11.0 feet, 80 percent efficiency.
1 horsepower=5,694,120 foot-gallons per day=550 foot-pounds per second=33,000 foot-pounds per minute=1,980,000 foot-pounds per hour=2,545 British thermal units per hour=76 kilogrammeters per second=1.27 kilogrammeters per minute= 746 watts.
1.3405 horsepower=1 kilowatt.
1 inch deep on 1 square mile=2,323,200 cubic feet=0.0737 second-foot for 1 year.
1 foot deep (head of 1 foot)=0.434 pound pressure on 1 square inch.
1 cubic meter per minute=0.5886 second-foot=4.403 United States gallons per second= 1.1674 acre-feet per day.
1 foot per second=0.68 mile per hour=1.907 kilometers per hour.
Acceleration of gravity, g=32.16 feet per second.

EXPLANATION OF DATA

The data presented in this report cover the year beginning October 1, 1934, and ending September 30, 1935. At the beginning of January in most parts of the United States much of the precipitation in the preceding 3 months is stored in the form of snow or ice, or in ponds, lakes, and swamps, or as underground water, and this stored water passes off in the streams during the spring break-up. At the end of September, on the other hand, the only stored water available for run-off is possibly a small quantity in the ground; therefore, the run-off for the year beginning October 1 is practically all derived from precipitation within that year.

The base data collected at gaging stations consist of records of stage, measurements of discharge, and general information used to supplement the gage heights and discharge measurements in determining the daily flow. The records of stage are obtained either from direct readings on a staff or chain gage or from a water-stage recorder that gives a continuous record of the fluctuations. Measurements of discharge are made with a current meter by the general methods outlined in standard textbooks on the measurement of river discharge.

Rating tables giving the discharge for any stage are prepared from the discharge measurements. The application of the daily gage height to these rating tables gives the daily discharge from which the monthly and yearly mean discharge is computed.

The data presented for each gaging station covered by this report comprise a description of the station, a table showing the daily discharge of the stream, a table of monthly and yearly discharge and run-off, and a summary table of run-off in second-feet per square mile, run-off depth in inches, precipitation, and per cent run-off to precipitation. For stations with insufficient base data to determine the daily discharge, the results of current meter discharge measurements are published in the table of miscellaneous discharge measurements.

The description of the station gives, in addition to statements regarding location and type of gage, information as to diversions that decrease the flow at the gage, artificial regulation, maximum and minimum recorded discharges, accuracy of the records, and average discharge for the stations that have a record for ten or more years. The maximum discharge given under "Extremes" represents the crest discharge determined from records of stage by water-stage recorders, or in case of nonrecording gages it is determined from flood marks or from graphs based on gage readings made once daily or more frequently.

The table of daily discharge gives, in general, the discharge in second-feet corresponding to the daily gage height, which may be the mean of two or more readings daily in the case of a nonrecording gage, or the mean daily gage height obtained from a water-stage recorder graph.

At stations on streams subject to sudden or rapid diurnal fluctuation, the discharge obtained from the rating table and the mean daily gage height may not be the true mean discharge for the day. If such stations are equipped with water-stage recorders, the mean daily discharge may be obtained by averaging discharge at regular intervals during the day or by using the discharge integrator, an instrument for obtaining mean daily discharge from a continuous gage-height graph and containing as an essential element the rating curve of the station.

In the table of monthly discharge the column headed "Maximum" gives the maximum daily discharge and not the discharge when the water surface was at crest height. Likewise, in the column headed "Minimum" the quantity given is the minimum daily discharge. The column headed "Mean" is the average flow in cubic feet per second during the month. On this average flow are based computations recorded in the remaining columns, which are defined on page 14.

ACCURACY OF FIELD DATA AND COMPUTED RECORDS

The accuracy of stream-flow data depends primarily (1) on the permanency of the stage-discharge relation and (2) on the accuracy of observation of stage, measurements of flow, and interpretation of records.

The station description gives a statement in regard to the general accuracy of the records. "Excellent" indicates that records are accurate within 5 per cent; "good," within 10 per cent; "fair," within 15 per cent; and "poor," within 20 per cent or more.

The monthly means for any station may represent with high accuracy the quantity of water flowing past the gage, but the figures showing discharge per square mile and run-off in inches may be subject to gross errors caused by the inclusion of large noncontributing districts in the measured drainage area.

The table of monthly discharge gives a general idea of the flow at the station. The table of daily discharge allows more detailed studies of the variation in flow. It should be borne in mind, however, that the observations in each succeeding year may be expected to throw new light on data previously published.

CO-OPERATION

Acknowledgment is due the following agencies for equipment and assistance in the collection of records.

American Sheet and Tin Plate Co., Vandergrift, Pa., (Vandergrift).
Bethlehem Steel Co., Johnstown, Pa., (Johnstown).
City of Lancaster, (Lancaster).
City of New Castle, (New Castle).
City of Philadelphia, (Philadelphia).
City of Wilmington, Del., (Chadds Ford).
Clarion River Power Co., Johnstown, Pa., (Piney).
Glatfelter Paper Co., Spring Grove, Pa., (Spring Grove).
Panther Valley Water Co., Lansford, Pa., (Tamaqua).
Penn Central Power Co., Altoona, Pa., (Saxton).
Pennsylvania Power and Light Co., Allentown, Pa., (Wilsonville).
Philadelphia Electric Co., Philadelphia, Pa., (Castle Fin, Harrisburg, Lancaster, and Manchester).
Robert O. Hayt, Consulting Engineer, Corning, N. Y., (Loyalsock).
Safe Harbor Water Power Corp., Baltimore, Md., (Marietta).
Philadelphia Suburban Water Co., Bryn Mawr, Pa., (Langhorne and Woodlyn).
United States Engineer Office, Baltimore, Md., (Dalmatia, Gapsville, Huntingdon, Marklesburg, Millerstown, Penns Creek, Shermandale, and Wapwallopen).
United States Engineer Office, Philadelphia, Pa., (Bethlehem and Tannery).
United States Engineer Office, Pittsburgh, Pa., (Charleroi, Franklin, Larabee, Parkers Landing, Sugar Creek, Sutersville, Utica, and Wampum).
United States Geological Survey, Albany, N. Y., (Port Jervis).

United States Geological Survey, Trenton, N. J., (Belvidere, Riegelsville, and Trenton).

United States Geological Survey, Washington, D. C., (Bedford Valley, Salisbury, and Sylvan).

United States Weather Bureau, Harrisburg, Pa., (Corning, Newport, and Sunbury).

West Penn Power Co., Pittsburgh, Pa., (Connellsville).

York Water Co., York, Pa., (York).

The Commonwealth of Pennsylvania is divided into six drainage basins: Delaware, Susquehanna, Potomac, Genesee, Erie, and Ohio. The hydrographic data in the following pages are divided into four groups corresponding to the basins in which the stations are located. There are no gaging stations in the Erie or Genesee Basins. The stations in each basin are shown in the following tables and their locations are indicated on the stream gaging map with reference numbers corresponding to those given in the tables.

GAGING STATIONS IN DELAWARE RIVER BASINS*

Station No.	Stream	Location
1	Delaware River	Port Jervis, N. Y.
2	Delaware River	Belvidere, N. J.
3	Delaware River	Riegelsville, N. J.
4	Delaware River	Trenton, N. J.
5	Lackawaxen River	West Hawley
6	Wallenpaupack Creek	Wilsonville
7	Bushkill Creek	Shoemakers
8	McMichaels Creek	Stroudsburg
9	Lehigh River	Tannery
10	Lehigh River	Bethlehem
11	Tohickon Creek	Pipersville
12	Neshaminy Creek	Rushland
13	Neshaminy Creek	Langhorne
14	Schuylkill River	Pottstown
15	Schuylkill River	Philadelphia
16	Little Schuylkill River	Tamaqua
17	Perkiomen Creek	Graters Ford
18	Crum Creek	Woodlyn
19	Ridley Creek	Moylan
20	Chester Creek	Chester
21	White Clay Creek	Newark, Del.
22	Brandywine Creek	Chadds Ford

* For information available on each station, see description of station.

GAGING STATIONS IN SUSQUEHANNA RIVER BASIN*

Station No.	Stream	Location
1	North Branch of Susquehanna River	Binghampton, N. Y.
2	North Branch of Susquehanna River	Towanda
3	North Branch of Susquehanna River	Wilkes-Barre
4	North Branch of Susquehanna River	Danville
5	Susquehanna River	Sunbury
6	Susquehanna River	Harrisburg
7	Susquehanna River	Marietta
8	Chemung River	Corning, N. Y.
9	Towanda Creek	Monroeton
10	Tunkhannock Creek	Dixon
11	Wapwallopen Creek	Wapwallopen
12	West Branch of Susquehanna River	Bower
13	West Branch of Susquehanna River	Renovo
14	West Branch of Susquehanna River	Lock Haven
15	West Branch of Susquehanna River	Williamsport
16	Clearfield Creek	Dimeling
17	Driftwood Branch of Sinnemahoning Creek	Sterling Run
18	North Bald Eagle Creek	Milesburg
19	North Bald Eagle Creek	Beech Creek Station
20	Pine Creek	Cedar Run
21	Lycoming Creek	Trout Run
22	Loyalsock Creek	Loyalsock
23	Penn Creek	Penns Creek
24	Mahantango Creek East	Dalmatia
25	Frankstown Branch of Juniata River	Williamsburg
26	Juniata River	Newport
27	Shaver Creek	Petersburg
28	Standing Stone Creek	Huntingdon
29	Raystown Branch of Juniata River	Saxton
30	Dunning Creek	Yount
31	Brush Creek	Gapsville
32	Great Trough Creek	Marklesburg
33	Aughwick Creek	Orbisonia
34	Tuscarora Creek	Port Royal
35	Cocolamus Creek	Millerstown
36	Sherman Creek	Shermandale
37	Conodoguinet Creek	Hogestown
38	Swatara Creek	Harper Tavern
39	Upper Little Swatara Creek	Pine Grove
40	West Conedago Creek	Manchester
41	Codorus Creek	Spring Grove
42	South Branch of Codorus Creek	York
43	Conestoga Creek	Lancaster
44	Muddy Creek	Castle Fin

GAGING STATIONS IN POTOMAC RIVER BASIN*

Station No.	Stream	Location
1	Evitts Creek	Bedford Valley
2	Licking Creek	Sylvan

* For information available on each station, see description of station.

Discharge in second-feet into run-off in millions of gallons

Discharge (second-feet)	Run-off (millions of gallons)				
	1 day	28 days	29 days	30 days	31 days
1	0.6463	18.10	18.74	19.39	20.04
2	1.293	36.20	37.48	38.78	40.08
3	1.939	54.30	56.22	58.17	60.12
4	2.585	72.40	74.96	77.56	80.16
5	3.232	90.50	93.70	96.95	100.2
6	3.878	108.6	112.4	116.3	120.2
7	4.524	126.7	131.2	135.7	140.3
8	5.170	144.8	149.9	155.1	160.3
9	5.817	162.9	168.7	174.5	180.4

Note—For part of a month multiply the run-off for 1 day by the number of days.

Velocity in feet per second into velocity in miles per hour

(1 foot per second=0.681818 mile per hour, or very nearly two-thirds mile per hour; 1 mile per hour=1.46666 feet per second. In computing the table the values 0.68182 and 1.4667 were used).

Feet per second (units)	Miles per hour for tenths of foot per second									
	0	1	2	3	4	5	6	7	8	9
0	0.000	0.068	0.136	0.205	0.273	0.341	0.409	0.477	0.545	0.614
1	.682	.750	.818	.886	.955	1.02	1.09	1.16	1.23	1.30
2	1.36	1.43	1.50	1.57	1.64	1.70	1.77	1.84	1.91	1.98
3	2.05	2.11	2.18	2.25	2.32	2.39	2.45	2.52	2.59	2.66
4	2.73	2.80	2.86	2.93	3.00	3.07	3.14	3.20	3.27	3.34
5	3.41	3.48	3.55	3.61	3.68	3.75	3.82	3.89	3.95	4.02
6	4.09	4.16	4.23	4.30	4.36	4.43	4.50	4.57	4.64	4.70
7	4.77	4.84	4.91	4.98	5.05	5.11	5.18	5.25	5.32	5.39
8	5.45	5.52	5.59	5.66	5.73	5.80	5.86	5.93	6.00	6.07
9	6.14	6.20	6.27	6.34	6.41	6.48	6.55	6.61	6.68	6.75

CONVENIENT EQUIVALENTS

LENGTH

1 inch=1/12 foot=0.027778 yard=0.000015783 mile=2.54 centimeters.
1 foot=12 inches=1/3 yard=0.00018939 mile=0.3048 meter.
1 yard=36 inches=3 feet=0.00056818 mile=0.9144 meter.
1 mile=63,360 inches=5,280 feet=1,760 yards=1.60935 kilometers.
1 meter=100 centimeters=0.001 kilometer=39.37 inches=3.2808 feet=1.0936 yards=0.00062137 mile.

SURFACE

1 square inch=0.006944 square foot=0.0007716 square yard=0.0000001594 acre=0.0000000002491 square mile=6.45163 square centimeters.
1 square foot=144 square inches=1/9 square yard=0.000022957 acre=0.00000003587 square mile=0.092903 square meter.
1 square yard=1,296 square inches=9 square feet=0.0002066 acre=0.0000003228 square mile =0.83613 square meter.
1 acre=6,272,640 square inches=43,560 square feet=4,840 square yards=0.0015625 square mile =208.71 feet square=0.404687 hectare.
1 square mile=4,014,489,000 square inches=27,878,400 square feet=3,097,600 square yards= 640 acres=259 hectares.
1 square meter=10,000 square centimeters=0.0001 hectare=0.000001 square kilometer=1,550 square inches=10.7639 square feet=1.19598 square yards=0.0002471 acre= 0.0000003861 square mile.

VOLUME

1 cubic inch=0.004329 United States gallon=0.0005787 cubic foot=16.3872 cubic centimeters.
1 United States gallon=231 cubic inches=0.13368 cubic foot=0.00000307 acre foot=3.78543 liters.
1 cubic foot=1,728 cubic inches=7.4805 United States gallons=0.037037 cubic yards= 0.000022957 acre-foot=28.317 liters.
1 cubic yard=46,656 cubic inches=27 cubic feet=0.00061983 acre-foot=0.76456 cubic meter.
1 acre-foot=325,851 United States gallons=43,560 cubic feet=1,613 1/3 cubic yards=1,233.49 cubic meters.
1 cubic meter, stere, or kiloliter=1,000,000 cubic centimeters=1,000 liters=61,023.4 cubic inches=264.17 United States gallons=35.3145 cubic feet=1.30794 cubic yards= 0.00081708 acre-foot.

HYDRAULICS

1 United States gallon of water weighs 8.34 pounds avoirdupois.
1 cubic foot of water weighs 62.5 pounds avoirdupois.
1 second-foot=7.48 United States gallons per second=448.8 United States gallons per minute =26,929.9 United States gallons per hour=646,317 United States gallons per day.
1 second-foot=60 cubic feet per minute=3,600 cubic feet per hour=86,400 cubic feet per day =31,536,000 cubic feet per year=0.000214 cubic mile per year.
1 second-foot=0.9917 acre-inch per hour=1.983471 acre-feet per day=723,966942 acre-feet per year.
1 second-foot=0.028317 cubic meter per second=1.699 cubic meters per minute=101.941 cubic meters per hour=2,446.58 cubic meters per day.
1 second-foot for 1 year (365 days) will cover 1 square mile 1.1312 feet or 13.5744 inches deep.
1 second-foot falling 10 feet=1.135 horsepower.
100 United States gallons per minute=0.223 second-foot=0.442 acre-foot in one day.
1 million gallons per day=1.55 second-feet=3.07 acre-feet per day=2.629 cubic meters per minute.
1 million gallons per month=0.05525 second-feet for one 28-day month=0.05334 second-foot for one 29-day month=0.05157 second-foot for one 30-day month=0.04990 second-foot for one 31-day month.
1,000,000,000 (1 United States billion) cubic feet=11,570 second-feet for one day=413 second-feet for one 28-day month=399 second-feet for one 29-day month=386 second-feet for one 30-day month=373 second-feet for one 31-day month.
1 horsepower=1 second-foot falling 8.8 feet.
1 horsepower=1 second-foot falling 11.0 feet, 80 percent efficiency.
1 horsepower=5,694,120 foot-gallons per day=550 foot-pounds per second=33,000 foot-pounds per minute=1,980,000 foot-pounds per hour=2,545 British thermal units per hour=76 kilogrammeters per second=1.27 kilogrammeters per minute= 746 watts.
1.3405 horsepower=1 kilowatt.
1 inch deep on 1 square mile=2,323,200 cubic feet=0.0737 second-foot for 1 year.
1 foot deep (head of 1 foot)=0.434 pound pressure on 1 square inch.
1 cubic meter per minute=0.5886 second-foot=4.403 United States gallons per second= 1.1674 acre-feet per day.
1 foot per second=0.68 mile per hour=1.907 kilometers per hour.
Acceleration of gravity, g=32.16 feet per second.

EXPLANATION OF DATA

The data presented in this report cover the year beginning October 1, 1934, and ending September 30, 1935. At the beginning of January in most parts of the United States much of the precipitation in the preceding 3 months is stored in the form of snow or ice, or in ponds, lakes, and swamps, or as underground water, and this stored water passes off in the streams during the spring break-up. At the end of September, on the other hand, the only stored water available for run-off is possibly a small quantity in the ground; therefore, the run-off for the year beginning October 1 is practically all derived from precipitation within that year.

The base data collected at gaging stations consist of records of stage, measurements of discharge, and general information used to supplement the gage heights and discharge measurements in determining the daily flow. The records of stage are obtained either from direct readings on a staff or chain gage or from a water-stage recorder that gives a continuous record of the fluctuations. Measurements of discharge are made with a current meter by the general methods outlined in standard textbooks on the measurement of river discharge.

Rating tables giving the discharge for any stage are prepared from the discharge measurements. The application of the daily gage height to these rating tables gives the daily discharge from which the monthly and yearly mean discharge is computed.

The data presented for each gaging station covered by this report comprise a description of the station, a table showing the daily discharge of the stream, a table of monthly and yearly discharge and run-off, and a summary table of run-off in second-feet per square mile, run-off depth in inches, precipitation, and per cent run-off to precipitation. For stations with insufficient base data to determine the daily discharge, the results of current meter discharge measurements are published in the table of miscellaneous discharge measurements.

The description of the station gives, in addition to statements regarding location and type of gage, information as to diversions that decrease the flow at the gage, artificial regulation, maximum and minimum recorded discharges, accuracy of the records, and average discharge for the stations that have a record for ten or more years. The maximum discharge given under "Extremes" represents the crest discharge determined from records of stage by water-stage recorders, or in case of nonrecording gages it is determined from flood marks or from graphs based on gage readings made once daily or more frequently.

The table of daily discharge gives, in general, the discharge in second-feet corresponding to the daily gage height, which may be the mean of two or more readings daily in the case of a nonrecording gage, or the mean daily gage height obtained from a water-stage recorder graph.

At stations on streams subject to sudden or rapid diurnal fluctuation, the discharge obtained from the rating table and the mean daily gage height may not be the true mean discharge for the day. If such stations are equipped with water-stage recorders, the mean daily discharge may be obtained by averaging discharge at regular intervals during the day or by using the discharge integrator, an instrument for obtaining mean daily discharge from a continuous gage-height graph and containing as an essential element the rating curve of the station.

In the table of monthly discharge the column headed "Maximum" gives the maximum daily discharge and not the discharge when the water surface was at crest height. Likewise, in the column headed "Minimum" the quantity given is the minimum daily discharge. The column headed "Mean" is the average flow in cubic feet per second during the month. On this average flow are based computations recorded in the remaining columns, which are defined on page 14.

ACCURACY OF FIELD DATA AND COMPUTED RECORDS

The accuracy of stream-flow data depends primarily (1) on the permanency of the stage-discharge relation and (2) on the accuracy of observation of stage, measurements of flow, and interpretation of records.

The station description gives a statement in regard to the general accuracy of the records. "Excellent" indicates that records are accurate within 5 per cent; "good," within 10 per cent; "fair," within 15 per cent; and "poor," within 20 per cent or more.

The monthly means for any station may represent with high accuracy the quantity of water flowing past the gage, but the figures showing discharge per square mile and run-off in inches may be subject to gross errors caused by the inclusion of large noncontributing districts in the measured drainage area.

The table of monthly discharge gives a general idea of the flow at the station. The table of daily discharge allows more detailed studies of the variation in flow. It should be borne in mind, however, that the observations in each succeeding year may be expected to throw new light on data previously published.

CO-OPERATION

Acknowledgment is due the following agencies for equipment and assistance in the collection of records.

American Sheet and Tin Plate Co., Vandergrift, Pa., (Vandergrift).
Bethlehem Steel Co., Johnstown, Pa., (Johnstown).
City of Lancaster, (Lancaster).
City of New Castle, (New Castle).
City of Philadelphia, (Philadelphia).
City of Wilmington, Del., (Chadds Ford).
Clarion River Power Co., Johnstown, Pa., (Piney).
Glatfelter Paper Co., Spring Grove, Pa., (Spring Grove).
Panther Valley Water Co., Lansford, Pa., (Tamaqua).
Penn Central Power Co., Altoona, Pa., (Saxton).
Pennsylvania Power and Light Co., Allentown, Pa., (Wilsonville).
Philadelphia Electric Co., Philadelphia, Pa., (Castle Fin, Harrisburg, Lancaster, and Manchester).
Robert O. Hayt, Consulting Engineer, Corning, N. Y., (Loyalsock).
Safe Harbor Water Power Corp., Baltimore, Md., (Marietta).
Philadelphia Suburban Water Co., Bryn Mawr, Pa., (Langhorne and Woodlyn).
United States Engineer Office, Baltimore, Md., (Dalmatia, Gapsville, Huntingdon, Marklesburg, Millerstown, Penns Creek, Shermandale, and Wapwallopen).
United States Engineer Office, Philadelphia, Pa., (Bethlehem and Tannery).
United States Engineer Office, Pittsburgh, Pa., (Charleroi, Franklin, Larabee, Parkers Landing, Sugar Creek, Sutersville, Utica, and Wampum).
United States Geological Survey, Albany, N. Y., (Port Jervis).

United States Geological Survey, Trenton, N. J., (Belvidere, Riegelsville, and Trenton).

United States Geological Survey, Washington, D. C., (Bedford Valley, Salisbury, and Sylvan).

United States Weather Bureau, Harrisburg, Pa., (Corning, Newport, and Sunbury).

West Penn Power Co., Pittsburgh, Pa., (Connellsville).

York Water Co., York, Pa., (York).

The Commonwealth of Pennsylvania is divided into six drainage basins: Delaware, Susquehanna, Potomac, Genesee, Erie, and Ohio. The hydrographic data in the following pages are divided into four groups corresponding to the basins in which the stations are located. There are no gaging stations in the Erie or Genesee Basins. The stations in each basin are shown in the following tables and their locations are indicated on the stream gaging map with reference numbers corresponding to those given in the tables.

GAGING STATIONS IN DELAWARE RIVER BASINS*

Station No.	Stream	Location
1	Delaware River	Port Jervis, N. Y.
2	Delaware River	Belvidere, N. J.
3	Delaware River	Riegelsville, N. J.
4	Delaware River	Trenton, N. J.
5	Lackawaxen River	West Hawley
6	Wallenpaupack Creek	Wilsonville
7	Bushkill Creek	Shoemakers
8	McMichaels Creek	Stroudsburg
9	Lehigh River	Tannery
10	Lehigh River	Bethlehem
11	Tohickon Creek	Pipersville
12	Neshaminy Creek	Rushland
13	Neshaminy Creek	Langhorne
14	Schuylkill River	Pottstown
15	Schuylkill River	Philadelphia
16	Little Schuylkill River	Tamaqua
17	Perkiomen Creek	Graters Ford
18	Crum Creek	Woodlyn
19	Ridley Creek	Moylan
20	Chester Creek	Chester
21	White Clay Creek	Newark, Del.
22	Brandywine Creek	Chadds Ford

* For information available on each station, see description of station.

GAGING STATIONS IN SUSQUEHANNA RIVER BASIN*

Station No.	Stream	Location
1	North Branch of Susquehanna River	Binghampton, N. Y.
2	North Branch of Susquehanna River	Towanda
3	North Branch of Susquehanna River	Wilkes-Barre
4	North Branch of Susquehanna River	Danville
5	Susquehanna River	Sunbury
6	Susquehanna River	Harrisburg
7	Susquehanna River	Marietta
8	Chemung River	Corning, N. Y.
9	Towanda Creek	Monroeton
10	Tunkhannock Creek	Dixon
11	Wapwallopen Creek	Wapwallopen
12	West Branch of Susquehanna River	Bower
13	West Branch of Susquehanna River	Renovo
14	West Branch of Susquehanna River	Lock Haven
15	West Branch of Susquehanna River	Williamsport
16	Clearfield Creek	Dimeling
17	Driftwood Branch of Sinnemahoning Creek	Sterling Run
18	North Bald Eagle Creek	Milesburg
19	North Bald Eagle Creek	Beech Creek Station
20	Pine Creek	Cedar Run
21	Lycoming Creek	Trout Run
22	Loyalsock Creek	Loyalsock
23	Penn Creek	Penns Creek
24	Mahantango Creek East	Dalmatia
25	Frankstown Branch of Juniata River	Williamsburg
26	Juniata River	Newport
27	Shaver Creek	Petersburg
28	Standing Stone Creek	Huntingdon
29	Raystown Branch of Juniata River	Saxton
30	Dunning Creek	Yount
31	Brush Creek	Gapsville
32	Great Trough Creek	Marklesburg
33	Aughwick Creek	Orbisonia
34	Tuscarora Creek	Port Royal
35	Cocolamus Creek	Millerstown
36	Sherman Creek	Shermandale
37	Conodoguinet Creek	Hogestown
38	Swatara Creek	Harper Tavern
39	Upper Little Swatara Creek	Pine Grove
40	West Conedago Creek	Manchester
41	Codorus Creek	Spring Grove
42	South Branch of Codorus Creek	York
43	Conestoga Creek	Lancaster
44	Muddy Creek	Castle Fin

GAGING STATIONS IN POTOMAC RIVER BASIN*

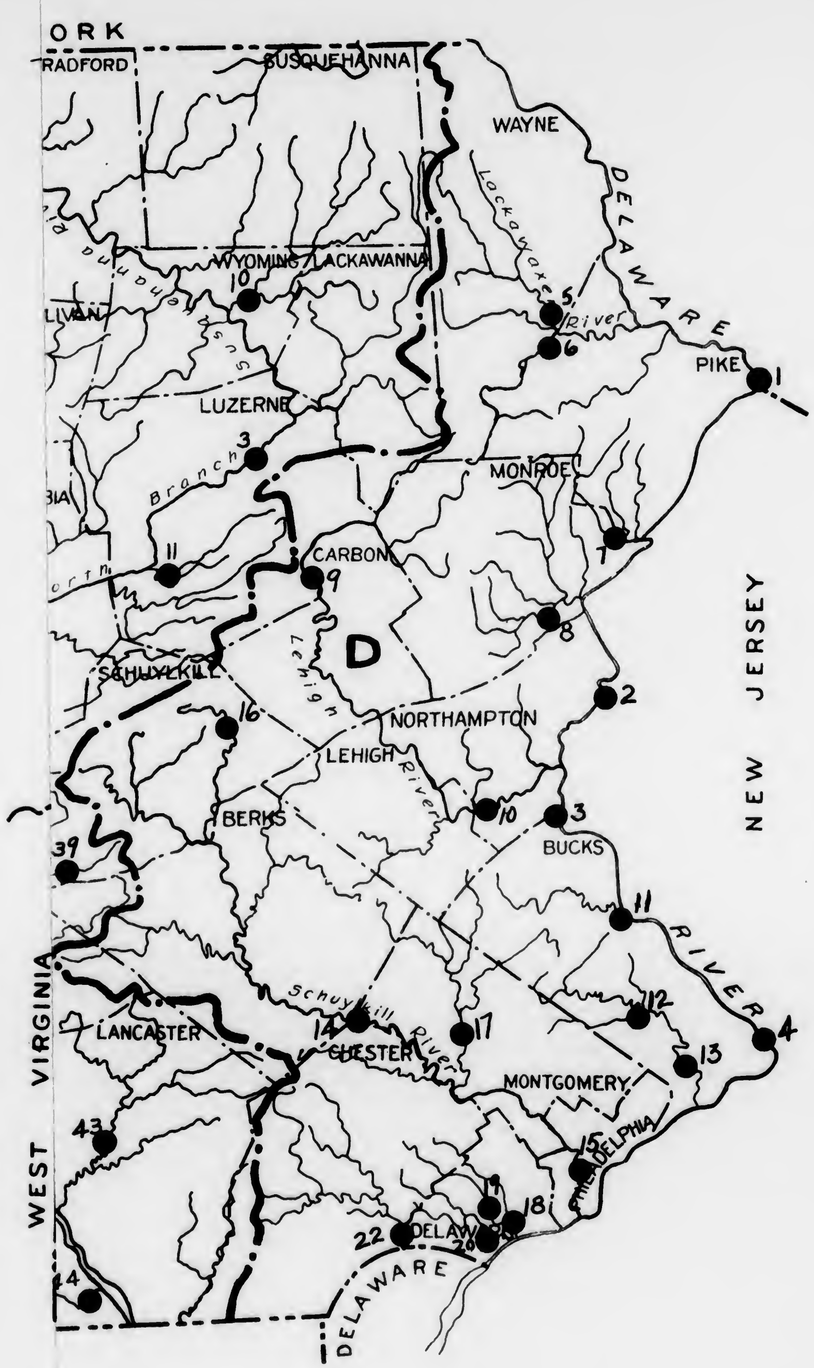
Station No.	Stream	Location
1	Evitts Creek	Bedford Valley
2	Licking Creek	Sylvan

* For information available on each station, see description of station.

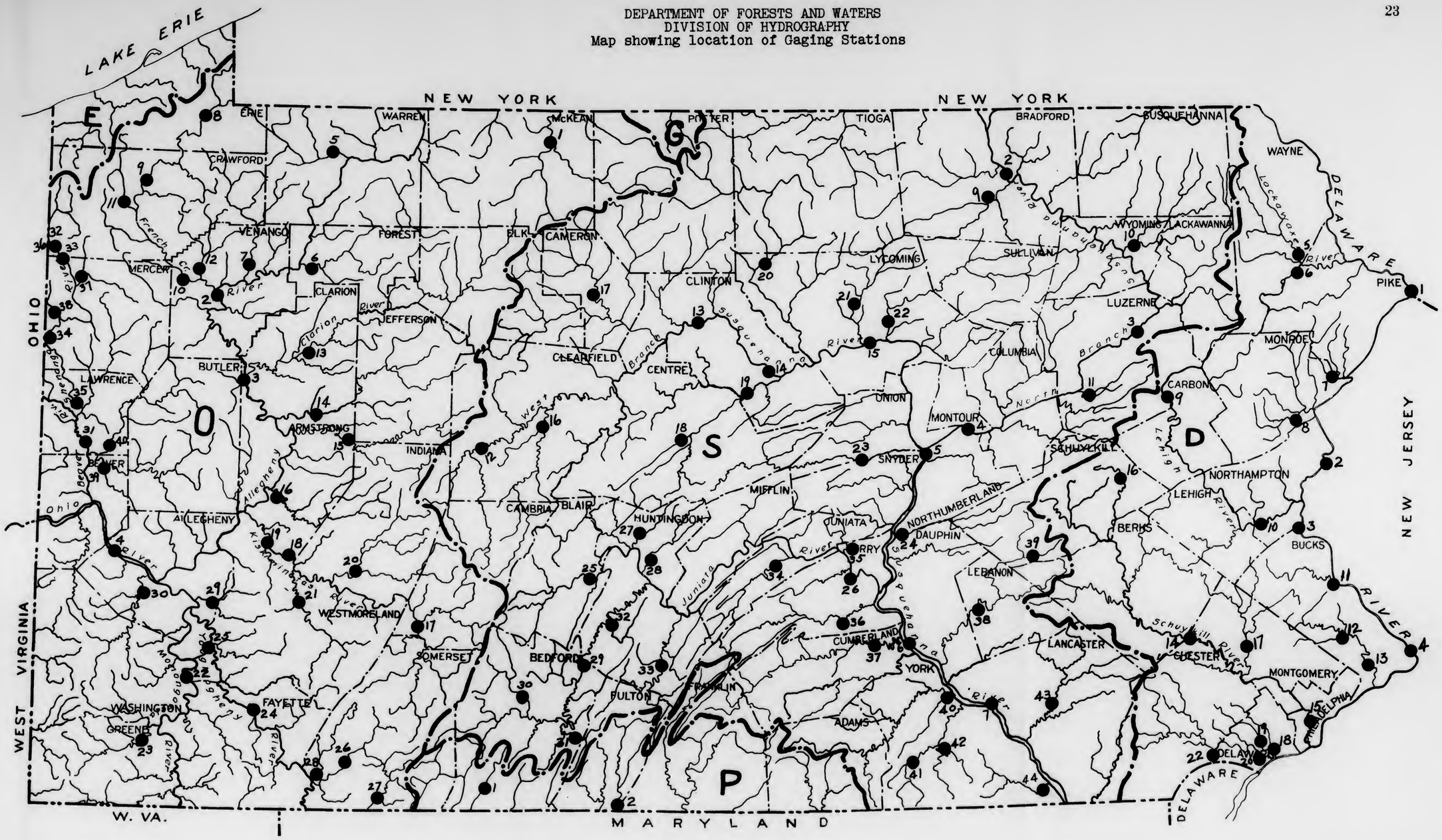
GAGING STATIONS IN OHIO RIVER BASIN *

Station No.	Stream	Location
1	Allegheny River	Larabee
2	Allegheny River	Franklin
3	Allegheny River	Parkers Landing
4	Ohio River	Sewickley
5	Brokenstraw Creek	Youngsville
6	Tionesta Creek	Nebraska
7	Oil Creek	Rouseville
8	French Creek	Carters Corners
9	French Creek	Saegertown
10	French Creek	Utica
11	Cussewago Creek	Meadville
12	Sugar Creek	Sugarcreek
13	Clarion River	Piney
14	Redbank Creek	St. Charles
15	Mahoning Creek	Dayton
16	Crooked Creek	Ford City
17	Stony Creek	Johnstown
18	Kiskiminetas River	Avonmore
19	Kiskiminetas River	Vandergrift
20	Blacklick Creek	Blacklick
21	Loyalhanna Creek	New Alexandria
22	Monongahela River	Charleroi
23	South Fork of Tenmile Creek	Jefferson
24	Youghiogheny River	Connellsville
25	Youghiogheny River	Sutersville
26	Casselman River	Markleton
27	Big Piney Run	Salisbury
28	Laurel Hill Creek	Ursina
29	Turtle Creek	Trafford
30	Chartiers Creek	Carnegie
31	Beaver River	Wampum
32	Pymatuning Reservoir	Pymatuning Dam
33	Shenango River	Pymatuning Dam
34	Shenango River	Jamestown
35	Shenango River	Sharon
36	Shenango River	New Castle
37	Sugar Run	Pymatuning Dam
38	Little Shenango River	Greenville
39	Pymatuning Creek	Orangeville
40	Connoquenessing Creek	Hazen
41	Slippery Rock Creek	Wurtemburg

* For information available on each station, see description of station.



DEPARTMENT OF FORESTS AND WATERS
DIVISION OF HYDROGRAPHY
Map showing location of Gaging Stations



GAGING-STATION RECORDS

DELAWARE RIVER BASIN

DELAWARE RIVER BASIN

Delaware River at Port Jervis, N. Y.

Location.- Water-stage recorder, lat. 41°22'20", long. 74°41'51", near highway bridge at Port Jervis, Orange County, 1¼ miles above mouth of Neversink River. Zero of gage is 415.605 feet above mean sea level.
Drainage area.- 3,076 square miles.
Records available.- October 1904 to September 1935.
Average discharge.- 31 years, 5,503 second-feet.
Extremes.- Maximum discharge during year, 53,500 second-feet Dec. 2 (gage height, 11.12 feet); minimum, 524 second-feet Sept. 30 (gage height, 1.23 feet); minimum daily discharge, 900 second-feet Aug. 25 and Sept. 30.
1904-35: Maximum discharge, 92,700 second-feet Mar. 28, 1914 (gage height, 16.0 feet); minimum, 175 second-feet Sept. 22, 23, 1908 (gage height, 0.60 foot); minimum daily discharge, 175 second-feet Sept. 22, 23, 1908.
Maximum discharge known, about 155,000 second-feet Oct. 10, 11, 1903 (gage height, 23.3 feet).
Remarks.- Records excellent except those for periods of ice effect, Dec. 11, 12, 14, 15, 18, Jan. 4-6, 15-17, 19, Jan. 27 to Feb. 3, Feb. 5-15, which are fair. Large diurnal fluctuation at medium and low stages owing to operation of power plants on tributary streams. Flow considerably regulated by storage in Lake Wallenpaupack, Toronto and Swinging Bridge Reservoirs; combined capacity 12,200,000,000 cubic feet. Records of storage in Lake Wallenpaupack furnished by Pennsylvania Power & Light Co., those for Toronto and Swinging Bridge Reservoirs furnished by Chas. H. Tenney & Co.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14,600	3,050	23,800	2,650	2,600	6,700	8,500	9,000	1,960	1,940	3,150	1,380
2	9,700	3,300	46,500	2,460	2,600	4,850	8,100	8,400	1,660	2,160	3,100	990
3	7,300	3,400	27,500	3,250	3,000	4,450	8,000	7,000	1,860	2,100	2,500	1,320
4	5,920	3,600	18,400	3,000	2,700	6,100	7,000	6,700	2,550	1,640	1,900	2,140
5	5,100	8,900	14,400	2,600	2,400	6,400	6,400	7,700	2,160	1,280	2,260	2,280
6	5,200	10,400	11,400	2,800	2,400	7,200	6,100	7,900	2,500	2,300	2,480	2,340
7	7,600	8,600	9,300	3,050	2,200	16,200	5,800	9,500	2,400	2,850	2,160	1,520
8	6,850	7,700	7,700	4,400	2,200	16,000	5,800	18,200	2,360	2,800	2,100	1,260
9	5,700	7,300	5,900	15,000	2,400	10,800	5,800	14,600	2,550	21,000	2,120	1,200
10	4,750	6,400	4,650	39,500	2,400	9,000	7,000	12,400	3,300	24,200	2,200	1,360
11	4,200	5,500	4,000	33,500	2,200	9,800	7,600	12,400	3,500	16,400	1,440	1,660
12	3,950	5,050	3,600	19,400	2,000	20,600	8,200	9,500	2,950	11,200	2,000	1,240
13	3,800	5,200	3,700	12,200	2,000	22,800	8,200	8,400	2,750	7,600	2,420	1,880
14	3,160	4,750	3,600	9,500	2,200	15,000	8,670	7,600	2,180	6,100	2,650	1,920
15	3,500	4,350	3,400	8,000	2,600	11,000	9,200	6,800	1,820	5,200	2,100	1,260
16	3,650	4,000	3,300	6,500	2,950	9,600	9,800	5,900	1,300	6,000	2,320	1,180
17	3,250	3,850	3,200	6,000	4,250	13,800	10,000	5,400	1,380	5,100	1,700	1,240
18	3,400	3,680	3,400	5,400	5,900	20,400	9,200	4,300	2,120	4,550	1,440	1,180
19	3,550	3,820	3,900	5,000	4,650	16,200	9,300	3,700	2,500	3,900	1,760	1,320
20	2,850	3,960	5,700	5,000	3,650	13,200	9,300	3,440	2,600	3,450	2,380	1,700
21	2,360	4,400	9,200	5,000	3,050	14,400	9,520	3,650	2,850	4,250	2,180	1,500
22	2,360	3,950	6,300	6,000	2,650	16,000	8,670	3,400	3,650	3,850	2,360	980
23	3,450	3,850	4,900	7,500	2,550	13,600	8,600	3,350	3,850	3,550	2,260	1,120
24	3,450	6,200	4,150	5,700	2,550	12,400	8,100	2,950	3,950	3,500	1,680	1,900
25	3,250	9,340	3,950	4,300	2,850	11,800	7,300	2,440	3,300	5,100	900	1,640
26	2,550	8,000	3,850	3,350	4,100	10,200	6,700	2,220	2,800	7,500	1,180	1,560
27	2,750	7,100	4,250	3,000	5,900	8,700	5,800	2,440	2,650	5,600	1,760	1,400
28	2,850	6,600	3,600	2,800	7,700	7,700	5,200	2,650	2,650	3,900	1,520	1,460
29	2,950	6,600	3,350	2,800		9,300	5,800	2,600	2,080	3,850	960	1,020
30	3,050	7,500	3,400	2,600		9,400	6,500	2,120	1,920	3,650	1,200	900
31	3,300		3,100	2,600		9,400		1,960		3,450	1,860	

Month	Observed			Storage	Observed		
	Maximum	Minimum	Mean	(Mean)	Mean	Per square mile	Run-off in inches
October	14,600	2,360	4,527	-160			
November	10,400	3,050	5,678	+131			
December	46,500	3,100	8,303	+511			
January	39,500	2,460	7,576	-128			
February	7,700	2,000	3,166	-126			
March	22,800	4,450	11,710	+713			
April	10,000	5,200	7,672	+234			
May	18,200	1,960	6,407	+185			
June	3,950	1,300	2,537	-351			
July	24,200	1,280	5,805	-101			
August	3,150	900	2,001	-797			
September	2,340	900	1,462	-629			
The year	46,500	900	5,604	- 41		1.82	24.73

Delaware River at Belvidere, N. J.

Location.- Water-stage recorder, lat. 40°49'35", long. 75°05'00", at Belvidere, Warren County, just below mouth of Pequest River.
Drainage area.- 4,542 square miles (revised).
Records available.- October 1922 to September 1935.
Average discharge.- 13 years, 7,730 second-feet, corrected for storage.
Extremes.- Maximum discharge during year, about 70,900 second-feet Dec. 2 (gage height, 15.03 feet); minimum, 1,380 second-feet Aug. 27 (gage height, 2.95 feet).
1922-35: Maximum discharge, 122,000 second-feet (revised) Aug. 25, 1933 (gage height, 19.90 feet); minimum, 838 second-feet Sept. 28, 1932 (gage height, 2.37 feet).
Maximum stage known, 28.6 feet, from authentic high-water mark, Oct. 10, 1903 (discharge, 220,000 second-feet).
Remarks.- Records excellent except those above 60,000 second-feet and those for period of ice effect, Jan. 24 to Feb. 2, Feb. 5-7, which are fair. Part of table of monthly discharge corrected for effect of storage in Lake Wallenpaupack and in Toronto and Swinging Bridge Reservoirs.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20,600	4,580	26,600	4,720	4,500	9,800	12,300	10,000	2,940	3,250	4,860	2,250
2	15,100	4,720	59,700	4,450	4,700	8,640	11,200	11,200	2,940	3,040	4,860	1,950
3	11,200	5,000	46,200	4,190	5,290	8,270	11,000	9,600	2,630	3,040	4,580	1,620
4	9,220	5,590	29,000	5,000	4,860	8,460	10,400	8,830	2,830	2,830	3,820	2,780
5	7,910	9,020	22,400	3,940	4,300	9,410	9,410	9,220	3,470	2,440	3,140	6,060
6	8,270	14,100	18,100	4,580	4,200	10,400	8,830	9,800	3,250	2,130	3,470	4,720
7	11,000	12,300	15,100	5,140	4,000	15,100	8,460	10,400	3,700	2,940	3,470	4,060
8	11,500	11,000	12,800	6,060	4,060	21,800	7,910	17,100	3,470	3,940	3,250	2,830
9	9,410	10,000	10,000	9,590	4,190	17,100	8,460	19,600	3,700	18,300	3,040	2,440
10	8,090	9,410	7,910	41,000	4,060	13,700	8,830	15,600	4,450	48,800	3,040	2,730
11	7,200	8,270	7,030	46,400	3,820	13,700	10,000	15,600	5,000	31,700	3,040	2,830
12	6,530	7,380	6,060	29,600	3,700	18,100	10,400	13,200	4,580	21,800	2,630	2,730
13	6,210	7,030	6,860	19,100	3,820	31,700	11,200	11,000	3,940	16,100	2,940	2,250
14	5,590	7,200	6,530	13,700	3,820	22,400	11,900	10,400	3,580	11,900	3,470	2,630
15	5,000	6,530	6,060	11,200	5,000	17,600	11,900	9,410	3,040	9,600	3,700	2,830
16	5,590	6,060	5,900	9,410	5,900	14,600	12,300	8,460	2,540	10,200	3,040	2,250
17	5,140	5,740	5,740	8,460	6,700	15,600	12,800	7,550	2,070	10,400	3,140	1,870
18	5,140	5,590	5,590	8,090	7,550	23,600	12,300	6,860	2,540	8,640	2,630	1,980
19	5,000	5,440	6,040	7,380	8,270	22,400	11,500	5,740	3,700	7,380	2,250	1,900
20	5,000	5,590	9,800	7,030	7,550	18,600	11,500	5,290	4,190	6,700	2,340	2,020
21	4,190	5,590	11,900	6,860	6,700	17,600	11,900	5,140	4,320	6,210	3,040	2,340
22	3,940	5,900	11,200	8,090	5,740	20,600	11,200	5,000	4,450	6,530	2,940	2,250
23	4,190	5,440	8,830	9,020	5,290	19,100	10,800	4,860	5,440	6,060	3,040	1,740
24	4,860	6,530	7,380	7,300	5,140	17,100	10,600	4,580	5,140	6,530	2,830	1,600
25	4,720	10,200	6,860	5,800	5,290	16,100	9,800	4,190	5,140	6,860	2,440	2,340
26	4,450	10,800	6,530	5,600	7,030	14,600	9,020	3,700	4,320	9,020	1,560	2,230
27	4,060	9,600	6,860	5,000	8,460	12,800	8,270	3,360	3,820	10,000	1,590	2,110
28	4,190	9,020	5,900	4,400	9,020	11,200	7,550	3,580	3,700	7,200	2,250	1,980
29	4,190	9,220	5,900	4,600		12,300	7,200	3,700	3,700	5,590	2,120	2,090
30	4,190	10,800	5,440	5,000		13,700	8,090	3,580	3,470	5,590	1,590	1,740
31	4,320		5,000	4,500		12,800		3,040		5,140	1,620	

Month	Observed				Corrected for storage		
	Maximum	Minimum	Mean		Mean	Per square mile	Run-off in inches
October	20,600	3,940	6,968		6,808	1.50	1.73
November	14,100	4,580	7,788		7,919	1.74	1.94
December	59,700	5,000	12,750		13,260	2.92	3.37
January	46,400	3,940	10,170		10,040	2.21	2.55
February	9,020	3,700	5,463		5,336	1.17	1.22
March	31,700	8,270	15,770		16,480	3.63	4.18
April	12,800	7,200	10,230		10,470	2.31	2.58
May	19,600	3,040	8,374		8,559	1.88	2.17
June	5,440	2,070	3,735		3,384	.745	.83
July	48,800	2,130	9,673		9,572	2.11	2.43
August	4,860	1,560	2,959		2,162	.476	.55
September	6,060	1,600	2,505		1,876	.411	.46
The year	59,700	1,560	8,075		8,033	1.77	24.01

Delaware River at Riegelsville, N. J.

Location.- Water-stage recorder, Lat. 40°35'35", long. 75°11'15", at suspension bridge at Riegelsville, Warren County, 600 feet above mouth of Musconetcong River, flow of which is included in records subsequent to Oct. 1, 1931. Zero of gage is 125.29 feet above mean sea level.
Drainage area.- 6,344 square miles (revised) includes drainage area of Musconetcong River.
Records available.- July 1906 to September 1935.
Average discharge.- 29 years, 10,770 second-feet (including flow of Musconetcong River subsequent to Oct. 1, 1931), corrected for diversion and storage.
Extremes.- Maximum discharge during year, about 125,000 second-feet July 10 (gage height, 23.20 feet); minimum, not including flow in Delaware Division Canal, 2,300 second-feet Sept. 24 (gage height, 2.48 feet).
1906-35: Maximum discharge, about 144,000 second-feet Mar. 28, 1913 (gage height, 25 feet); minimum, not including flow in canal, 870 second-feet Sept. 20, 1908 (gage height, 1.55 feet).
Maximum stage known, 35.9 feet, from authentic high-water marks, Oct. 10, 11, 1903 (discharge, about 275,000 second-feet).
Remarks.- Records good below and fair above 30,000 second-feet. Discharge estimated Aug. 2-7. Part of table of monthly discharge corrected for diversion in Delaware Division Canal and for effect of storage in Lakes Wallenpaupack and Hopatcong, and in Swinging Bridge and Toronto Reservoirs.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28,500	6,080	37,000	7,820	6,850	12,700	16,300	12,400	4,140	5,610	6,700	2,940
2	21,100	6,380	81,900	7,170	7,010	12,400	15,000	13,900	4,280	4,860	7,100	2,940
3	15,800	6,540	64,500	6,850	7,490	12,000	14,200	12,400	3,880	4,560	7,400	2,730
4	12,700	7,170	42,200	7,170	7,330	12,000	13,900	11,200	3,760	4,280	8,500	4,520
5	11,200	13,100	32,600	6,230	6,540	12,700	12,700	11,200	4,860	4,140	6,900	11,200
6	12,400	18,000	26,000	6,700	6,380	13,500	12,400	12,000	4,710	3,390	5,400	8,150
7	15,400	16,700	21,600	7,660	6,080	18,000	11,600	12,400	5,160	4,010	5,400	6,850
8	15,400	14,200	18,400	9,500	6,080	27,000	10,900	18,000	5,010	5,160	5,310	5,460
9	13,100	12,700	15,000	12,700	6,380	22,600	11,600	24,000	5,160	28,300	4,860	4,280
10	11,200	12,000	12,400	40,400	6,380	18,000	12,400	18,800	6,380	103,000	4,560	4,420
11	10,200	10,900	10,500	53,800	6,230	17,500	13,100	18,000	6,700	55,700	5,160	4,560
12	9,160	9,840	9,160	37,800	5,760	22,600	13,900	16,300	6,380	35,700	4,420	4,140
13	8,480	9,160	10,200	25,500	5,760	37,300	14,600	13,900	5,460	26,500	4,010	3,760
14	8,150	9,160	9,500	18,800	6,230	30,500	15,000	12,700	5,160	19,700	4,710	3,880
15	7,330	8,480	9,160	14,600	11,600	24,000	15,400	12,000	4,420	15,400	5,160	4,280
16	7,490	8,150	9,160	12,700	11,600	20,200	15,800	10,500	3,880	15,000	4,710	3,880
17	7,490	7,660	8,820	12,000	12,700	20,200	16,300	9,840	3,390	15,400	4,280	3,160
18	7,170	7,330	8,150	11,200	12,400	27,500	15,800	8,820	3,390	12,700	4,140	3,160
19	7,010	7,330	8,820	9,840	11,600	28,500	15,000	7,820	5,310	10,900	3,510	3,050
20	6,850	7,170	14,600	9,840	10,900	24,000	15,000	7,010	6,380	10,200	3,280	3,050
21	6,230	7,170	16,300	9,840	9,160	22,600	15,000	6,700	6,380	9,500	4,140	3,280
22	6,080	7,660	15,400	11,200	8,820	26,500	14,600	6,700	6,230	9,500	4,280	3,390
23	5,920	7,490	12,700	12,400	8,150	25,500	13,900	6,380	7,490	8,820	4,140	2,940
24	6,700	8,820	10,900	10,500	7,490	22,600	13,500	6,230	7,490	10,200	4,010	2,530
25	6,700	12,000	9,840	8,150	7,820	21,100	12,700	5,760	7,010	9,840	3,760	3,050
26	6,380	13,500	9,840	8,150	11,400	19,300	11,600	5,160	6,230	11,200	2,940	3,160
27	5,920	12,000	10,200	7,330	13,900	17,100	10,900	4,860	5,460	12,700	2,530	2,940
28	6,080	11,200	8,820	6,540	12,400	15,000	9,840	4,560	5,310	9,840	3,160	2,730
29	5,920	12,000	9,160	6,850		16,300	9,500	4,860	5,460	7,820	3,160	2,940
30	5,920	15,000	8,480	7,660		18,000	10,900	4,710	6,230	7,490	2,840	2,840
31	5,760		7,170	6,850		16,300		4,420		7,170	2,530	

Month	Observed				Corrected for storage & diversion		
	Maximum	Minimum	Mean		Mean	Per square mile	Run-off in inches
October	28,500	5,760	9,798		9,552	1.51	1.74
November	18,000	6,080	10,160		10,340	1.63	1.82
December	81,900	7,170	18,340		18,870	2.97	3.42
January	53,800	6,230	13,350		13,240	2.09	2.41
February	13,900	5,760	8,587		8,467	1.33	1.38
March	37,300	12,000	20,440		21,200	3.34	3.85
April	16,300	9,500	13,440		13,730	2.16	2.41
May	24,000	4,420	10,440		10,710	1.69	1.95
June	7,490	3,390	5,370		5,059	.797	.89
July	103,000	3,390	15,760		15,750	2.48	2.86
August	9,500	2,530	4,613		3,841	.605	.70
September	11,200	2,530	4,007		3,438	.542	.60
The year	103,000	2,530	11,250		11,240	1.77	24.03

Delaware River at Trenton, N. J.

Location.- Water-stage recorder, lat. 40°13'20", long. 74°46'40", 200 feet above Calhoun Street Bridge, at Trenton, Mercer County, and half a mile above mouth of Assunpink Creek. Zero of gage is 7.46 feet above mean sea level.
Drainage area.- 6,796 square miles (revised).
Records available.- February 1913 to September 1935.
Average discharge.- 22 years, 11,290 second-feet, corrected for diversions and storage.
Extremes.- Maximum discharge during year, 129,000 second-feet July 10 (gage height, 11.74 feet); minimum, 2,670 second-feet Aug. 28, Sept. 1, 25 (gage height, 0.23 foot). Flow in canals not included.
1913-35: Maximum discharge, about 160,000 second-feet Mar. 28, 29, 1913 (gage height, 13.3 feet); maximum gage height, 14.2 feet Mar. 5, 1934 (owing to ice jam); minimum discharge, 1,220 second-feet Sept. 18, 1932. Flow in canals not included.
Remarks.- Records good except those for periods of ice effect, Dec. 12, 13, Jan. 5, 6, Jan. 24 to Feb. 20, which are fair. Part of table of monthly discharge corrected for diversions in Trenton Power Race and Delaware & Raritan Canal, and for effect of storage in Lakes Wallenpaupack and Hopatcong, and in Swinging Bridge and Toronto Reservoir. Delaware Division Canal closed to navigation since 1932.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29,500	6,280	31,900	8,860	7,300	13,800	17,100	12,200	4,360	6,060	7,220	2,700
2	24,800	6,740	77,000	10,100	7,400	14,600	16,300	14,600	4,180	5,080	7,740	3,220
3	18,700	6,970	72,800	7,740	7,700	14,200	15,200	14,200	4,110	4,530	8,000	3,220
4	15,200	7,470	47,400	8,000	7,700	13,500	14,900	12,200	3,910	4,530	9,150	3,860
5	13,200	12,000	35,500	7,000	7,200	13,500	13,800	11,900	4,180	4,180	7,470	14,600
6	15,600	17,500	28,500	7,200	6,800	14,600	13,500	12,800	4,890	3,840	5,650	14,900
7	17,500	19,100	23,900	8,000	6,700	17,100	12,800	13,500	4,710	3,480	5,650	9,460
8	17,500	16,300	20,300	9,150	6,700	25,700	12,200	16,300	5,080	4,710	5,650	6,970
9	15,600	14,600	17,100	11,900	7,000	26,200	12,500	24,800	5,080	19,000	5,460	5,460
10	13,200	13,500	13,800	30,900	6,900	19,900	13,500	21,200	5,650	110,000	4,890	4,890
11	11,900	12,200	12,200	55,800	6,600	18,700	13,800	18,700	6,500	68,700	5,080	4,890
12	10,700	11,300	11,300	43,000	6,400	22,200	14,600	18,700	6,740	41,900	5,260	4,710
13	9,770	10,400	12,000	28,500	6,400	38,100	16,000	15,200	5,860	30,500	4,530	4,530
14	9,150	9,770	11,300	20,800	6,700	35,500	16,300	13,800	5,260	23,000	4,710	3,940
15	8,280	9,770	10,700	16,700	12,000	27,500	16,300	12,800	4,710	18,700	5,260	4,360
16	7,740	8,860	9,770	14,200	13,000	22,100	16,300	11,600	4,180	15,200	5,460	4,360
17	8,280	8,280	9,150	13,500	14,000	20,800	17,100	10,700	3,810	16,700	4,710	3,840
18	7,470	8,000	8,860	11,900	14,000	25,700	17,100	9,770	3,480	14,600	4,710	3,290
19	7,740	7,740	9,460	11,900	13,000	30,500	16,000	8,560	4,140	12,200	4,180	3,380
20	7,220	7,740	14,600	11,000	12,000	26,600	15,600	7,470	6,280	11,300	3,770	3,250
21	7,220	7,740	16,700	10,700	11,600	23,900	15,600	6,970	6,500	11,000	3,770	3,320
22	6,280	8,000	17,900	12,500	10,400	26,600	15,600	6,740	6,280	10,100	4,530	3,640
23	6,280	8,000	14,600	13,800	9,460	27,500	14,900	6,740	6,740	9,770	4,530	3,540
24	6,740	8,280	12,500	12,000	8,560	24,800	14,200	6,280	8,000	10,400	4,360	3,070
25	6,970	11,300	11,000	9,000	8,860	22,100	13,500	6,060	6,970	11,000	4,110	2,730
26	6,970	14,600	11,000	8,800	12,500	21,200	12,800	5,650	6,740	11,600	3,740	3,460
27	6,280	13,200	11,600	8,000	16,300	18,700	11,900	5,080	5,860	13,500	2,970	3,410
28	6,280	12,200	11,000	7,200	13,800	17,100	11,000	4,890	5,460	12,200	2,730	3,250
29	6,280	12,500	10,100	7,200		16,700	10,400	5,080	5,260	9,460	3,320	3,160
30	6,280	15,600	9,770	8,400		18,700	10,700	5,080	5,860	7,740	3,350	3,290
31	6,060		8,860	7,500		17,900		4,890		7,740	2,880	

Month	Observed				Corrected for storage & diversion		
	Maximum	Minimum	Mean		Mean	Per square mile	Run-off in inches
October	29,500	6,060	10,990		10,870	1.60	1.84
November	19,100	6,280	10,860		11,200	1.65	1.84
December	77,000	8,860	19,760		20,440	3.01	3.47
January	55,800	7,000	14,230		14,190	2.09	2.41
February	16,300	6,400	9,535		9,475	1.39	1.45
March	38,100	13,500	21,810		22,670	3.34	3.85
April	17,100	10,400	14,380		14,780	2.17	2.42
May	24,800	4,890	11,110		11,490	1.69	1.95
June	8,000	3,480	5,359		5,239	.771	.86
July	110,000	3,480	17,180		17,370	2.56	2.95
August	9,150	2,730	4,995		4,374	.644	.74
September	14,900	2,700	4,756		4,307	.634	.71
The year	110,000	2,700	12,140		12,260	1.80	24.49

Lackawaxen River at West Hawley, Pa.

Location.- Chain gage, lat. 41°28'10", long. 75°11'15", at Riverside Bridge, at West Hawley, Wayne County, half a mile above mouth of Middle Creek.
Drainage area.- 206 square miles.
Records available.- October 1931 to September 1935 in reports of U. S. Geological Survey; May 1921 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 11 years (1924-35), 350 second-feet.
Extremes.- Maximum discharge during year, 4,730 second-feet Dec. 1 (gage height, 7.9 feet, from graph based on gage readings); minimum, 46 second-feet Aug. 31 (gage height, 1.13 feet).
1921-35: Maximum discharge, about 7,430 second-feet Aug. 24, 1933 (gage height, 11.0 feet, from graph based on gage readings); minimum, 15 second-feet Sept. 2, 3, 1929 (gage height, 0.74 foot).
Remarks.- Records good except those estimated for periods of ice effect, Dec. 10-16, Jan. 2-7, Jan. 24 to Mar. 6, which are poor. Some regulation at low stages from operation of mills upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	785	151	2,410	190	173	270	444	467	114	90	124	51
2	540	202	3,000	185	168	240	444	360	96	75	128	64
3	444	160	1,410	180	164	240	380	380	98	71	131	64
4	380	246	960	180	160	270	340	422	81	68	112	262
5	321	614	785	180	157	430	302	401	73	68	110	470
6	515	444	592	190	154	1,500	284	467	79	80	105	253
7	540	422	515	230	152	1,410	284	1,200	81	318	107	188
8	380	360	380	716	151	840	266	1,560	131	590	100	157
9	302	340	266	1,560	150	592	401	1,080	141	1,920	88	126
10	266	284	240	1,860	150	540	648	1,620	126	2,850	73	121
11	253	266	220	980	150	1,390	1,020	1,020	128	1,610	90	121
12	230	256	210	592	150	1,890	1,020	620	100	462	114	114
13	205	230	200	422	150	1,140	1,080	540	88	360	98	96
14	199	211	195	401	160	592	960	467	88	284	185	81
15	185	202	190	340	250	565	900	401	90	214	136	83
16	173	218	187	321	500	702	900	360	69	208	110	79
17	165	243	182	263	550	900	702	321	64	190	90	73
18	165	230	182	302	350	960	702	263	73	157	81	68
19	154	236	212	302	200	840	675	230	168	131	88	66
20	149	243	504	284	130	730	565	205	211	236	88	62
21	134	218	302	321	120	1,460	467	188	179	157	83	68
22	170	221	250	401	115	1,120	422	173	584	157	90	66
23	170	248	211	401	115	840	401	162	302	160	94	66
24	165	926	208	330	120	785	360	160	240	182	73	69
25	157	650	205	280	170	675	302	149	193	893	73	64
26	165	491	202	250	350	540	263	136	160	862	92	66
27	188	444	208	230	470	422	256	128	138	284	69	66
28	168	467	205	215	350	422	243	124	114	214	58	79
29	149	467	199	200		785	266	116	103	179	58	79
30	144	631	199	190		565	565	116	107	151	51	71
31	141		193	180		491		110		144	50	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	785	134	261	1.27	1.46
November	926	151	344	1.67	1.86
December	3,000	182	491	2.38	2.74
January	1,860	180	409	1.99	2.29
February	550	115	214	1.04	1.08
March	1,890	240	779	3.78	4.36
April	1,080	243	529	2.57	2.87
May	1,620	110	450	2.18	2.51
June	584	64	141	.684	.76
July	2,850	68	431	2.09	2.41
August	185	50	95.1	.462	.53
September	470	51	110	.534	.60
The year	3,000	50	356	1.73	23.47

Wallenpaupack Creek at Wilsonville, Pa.

Location.- At hydroelectric plant of Pennsylvania Power & Light Co. with dam, lat. 41°27'35", long. 75°11'05", at Wilsonville, Wayne County, 1¼ miles south of Hawley.
Drainage area.- 228 square miles.
Records available.- October 1918 to September 1921, June 1926 to September 1935 in reports of U. S. Geological Survey; July 1908 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 19 years (1913-22, 1925-35), 376 second-feet, corrected for storage.
Remarks.- Records good. Flow computed from output of generators. No discharge over spillway during year. Daily discharge not corrected for storage. No corrections made for evaporation from Lake Wallenpaupack. Discharge measurements, records of power-plant operations, and water-surface elevations in lake and tailrace furnished by Pennsylvania Power & Light Co.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	97	87	55	35	367	403	240	312	225	576	508	155
2	159	116	86	553	127	5.2	350	448	0	651	580	268
3	40	127	262	343	0	0	246	362	1,080	649	42	953
4	163	0	326	484	270	609	190	112	825	0	0	624
5	161	207	262	287	364	666	301	84	619	911	798	592
6	113	191	250	0	322	509	108	213	564	890	508	499
7	0	364	259	482	300	670	11	473	666	257	496	203
8	140	165	139	533	148	485	482	272	378	610	412	0
9	350	150	34	559	18	171	352	184	10	560	904	413
10	269	85	353	426	0	0	578	166	1,060	706	135	447
11	269	0	451	242	169	439	556	0	746	599	0	0
12	226	80	395	208	233	599	646	64	949	548	329	352
13	46	414	468	4.1	148	437	104	239	725	144	590	795
14	83	149	326	277	356	475	33	405	526	0	537	468
15	820	103	175	344	131	416	893	473	53	487	401	119
16	487	60	0	233	83	0	741	233	0	555	642	329
17	891	23	363	521	0	0	645	131	539	626	232	263
18	740	0	438	188	82	307	573	21	894	677	133	315
19	815	59	736	193	169	625	282	4.8	360	664	890	659
20	126	74	482	0	74	405	70	200	274	808	894	657
21	0	307	362	623	83	436	0	369	726	535	983	204
22	722	112	514	591	45	115	93	450	0	667	979	64
23	855	82	114	538	59	178	435	338	0	631	935	790
24	583	37	290	488	0	0	530	82	553	612	0	752
25	120	1.7	0	254	113	381	490	0	432	760	0	787
26	91	319	525	190	512	375	504	0	496	620	706	723
27	0	268	451	157	452	208	284	570	528	71	604	758
28	0	107	474	494	368	338	140	535	470	71	37	419
29	68	15	430	617		133	483	533	39	627	149	135
30	394	56	22	560		117	572	0	0	585	868	739
31	381		274	550		117		394		584	647	

Month	Observed				Corrected for storage		
	Maximum	Minimum	Mean		Mean	Per square mile	Run-off in inches
October	891	0	297		169	0.741	0.85
November	414	0	125		302	1.32	1.47
December	736	0	301		696	3.05	3.52
January	623	0	354		225	.987	1.14
February	512	0	178		264	1.16	1.21
March	670	0	310		752	3.30	3.80
April	893	0	364		576	2.53	2.82
May	570	0	247		355	1.56	1.80
June	1,080	0	458		120	.526	.59
July	911	0	538		597	2.62	3.02
August	983	0	482		- 36.4	- .160	- .18
September	953	0	449		- 24.2	- .106	- .12
The year	1,080	0	343		335	1.47	19.92

Bushkill Creek at Shoemakers, Pa.

Location.- Chain gage, lat. 41°05'15", long 75°02'20", at highway bridge three quarters of a mile northwest of Shoemakers, Monroe County, and 2 miles southwest of Bushkill.
Drainage area.- 117 square miles.
Records available.- October 1918 to September 1920, October 1931 to September 1935 in reports of U. S. Geological Survey; September 1908 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 23 years (1908-16, 1920-35), 233 second-feet.
Extremes.- Maximum discharge during year, about 2,740 second-feet July 10 (gage height, 5.9 feet, from graph based on gage readings); minimum, 34 second-feet Sept. 27, 28 (gage height, 1.26 feet).
1908-35: Maximum gage height (estimated), 7.2 feet July 24, 1920 (discharge not determined); minimum discharge, 4 second-feet Sept. 21, 26, 1932 (gage height, 0.90 foot).
Remarks.- Records good except those for extremely high stages, and those estimated for periods of ice effect, Dec. 10-16, Dec. 31 to Jan. 9, Jan. 15 to Mar. 6, which are poor. Some regulation at low stages from operation of mills upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	326	99	1,480	160	130	210	268	191	80	144	134	36
2	256	124	1,450	155	125	180	252	166	76	99	142	37
3	216	110	1,100	160	122	180	230	155	73	85	139	41
4	184	246	878	155	120	190	216	164	73	78	119	98
5	161	452	720	150	118	220	203	161	76	71	110	279
6	296	375	600	150	116	310	194	175	110	66	91	169
7	344	339	510	150	115	480	187	256	112	63	99	110
8	275	291	425	160	114	400	178	283	101	414	97	81
9	227	252	339	380	113	330	234	241	197	2,040	85	80
10	197	230	300	600	114	366	287	227	197	2,340	74	126
11	178	216	270	452	115	375	271	216	149	1,660	97	89
12	166	197	260	334	114	660	271	203	117	1,170	87	71
13	152	181	245	283	112	600	330	191	101	942	76	62
14	139	175	230	287	115	480	300	200	91	750	142	69
15	129	161	220	260	220	425	275	184	78	600	112	80
16	124	147	210	250	270	425	256	166	68	1,040	93	66
17	121	147	207	240	300	540	244	155	67	975	80	56
18	117	147	194	230	220	510	241	142	197	812	63	48
19	110	144	268	220	150	425	224	136	191	630	60	46
20	103	134	510	220	115	400	213	126	197	540	58	48
21	110	134	357	240	108	480	200	121	161	452	58	47
22	114	136	296	290	105	480	191	114	166	375	60	48
23	108	144	271	260	105	425	181	117	147	326	56	42
24	103	260	230	230	105	375	172	112	121	452	48	37
25	97	230	220	210	110	348	161	108	105	366	43	36
26	99	200	252	190	250	317	152	103	93	339	41	36
27	112	181	216	170	330	283	142	97	85	271	38	35
28	101	194	264	160	270	264	136	91	110	227	41	36
29	95	238	252	150		375	129	87	87	200	38	50
30	91	511	181	140		339	187	83	200	169	36	46
31	83		170	135		300		83		149	36	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	344	83	159	1.36	1.57
November	511	99	213	1.82	2.03
December	1,480	170	423	3.62	4.17
January	600	135	231	1.97	2.27
February	330	105	154	1.32	1.38
March	660	180	377	3.22	3.71
April	330	129	218	1.86	2.08
May	283	83	157	1.34	1.54
June	200	67	121	1.03	1.15
July	2,340	63	576	4.92	5.67
August	142	36	79.1	.676	.78
September	279	35	70.2	.600	.67
The year	2,340	35	233	1.99	27.02

McMichaels Creek at Stroudsburg, Pa.

Location.- Chain gage, lat. 40°58'40", long 75°12'30", at railroad bridge at Wilkes-Barre and Eastern Railroad car shops, three quarters of a mile southwest of Stroudsburg, Monroe County.
Drainage area.- 64.4 square miles.
Records available.- October 1920 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; August 1911 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 22 years (1911-18, 1920-35), 118 second-feet.
Extremes.- Maximum discharge during year, about 2,890 second-feet July 10 (gage height, 8.5 feet, from graph based on gage readings); minimum, 29 second-feet July 5 (gage height, 2.66 feet).
1911-35: Maximum discharge (estimated), 3,640 second-feet Sept. 4, 1933 (gage height, 9.4 feet, from graph based on gage readings); minimum, 7.2 second-feet Nov. 30, 1930 (gage height, 2.34 feet); minimum daily discharge, 9.0 second-feet Nov. 30, 1930.
Remarks.- Records good except those for high stages and those estimated for periods of ice effect, Dec. 9-16, Dec. 31 to Jan. 8, Jan. 15 to Feb. 14, and for period of missing gage-height record, Mar. 20, which are fair. Regulation at low stages from operation of power plants upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	177	74	1,330	108	69	167	131	80	36	36	65	34
2	143	72	1,040	108	68	125	131	74	38	32	93	38
3	127	63	639	110	68	143	118	75	37	32	92	50
4	116	248	477	105	68	129	114	75	44	31	72	203
5	116	207	348	100	67	127	110	72	45	32	62	308
6	326	127	297	98	66	152	114	75	49	33	57	126
7	188	116	264	98	66	157	102	91	43	31	62	85
8	140	104	218	160	66	140	97	82	43	46	65	68
9	129	100	185	233	67	125	160	70	60	961	57	67
10	121	95	165	314	68	125	121	72	49	1,840	54	82
11	116	91	150	233	69	162	106	69	44	794	76	62
12	106	91	140	190	68	264	114	64	40	500	58	58
13	98	86	130	162	63	177	125	64	36	372	54	57
14	93	86	125	157	68	162	118	68	33	281	54	64
15	89	77	118	135	204	152	108	63	34	224	50	57
16	84	79	115	120	177	172	110	60	32	320	47	54
17	82	77	116	115	204	174	112	57	34	186	47	48
18	82	75	108	110	152	143	104	57	50	156	43	49
19	75	75	157	110	121	143	100	52	58	132	42	54
20	74	72	248	112	112	130	91	52	64	130	43	52
21	72	72	172	115	82	233	93	52	47	108	43	48
22	98	72	157	140	95	167	93	49	50	117	46	49
23	75	72	140	110	100	177	89	52	42	95	46	49
24	70	190	129	100	95	164	84	50	37	134	36	43
25	68	97	125	92	97	157	80	50	38	98	42	42
26	72	87	204	86	280	134	79	47	33	100	35	40
27	75	93	152	80	167	152	75	44	33	85	39	39
28	69	110	204	76	172	150	74	44	33	80	46	39
29	63	138	131	74		174	70	43	32	72	35	44
30	60	350	116	72		138	125	40	43	71	36	43
31	60		110	70		140		44		68	40	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	326	60	105	1.63	1.88
November	350	63	110	1.71	1.91
December	1,330	108	258	4.01	4.62
January	314	70	126	1.96	2.26
February	280	63	107	1.66	1.73
March	264	125	157	2.44	2.81
April	160	70	105	1.63	1.82
May	91	40	60.9	.946	1.09
June	64	32	41.9	.651	.73
July	1,840	31	232	3.60	4.15
August	93	35	52.8	.820	.95
September	308	34	68.4	1.06	1.18
The year	1,840	31	119	1.85	25.13

Lehigh River at Tannery, Pa.

Location.- Water-stage recorder, lat. 41°02'25", long. 75°45'50", 600 feet above highway bridge at Tannery, Carbon County. Zero of gage is 1,041.98 feet above mean sea level.
Drainage area.- 322 square miles.
Records available.- October 1919 to September 1921, October 1928 to September 1935 in reports of U. S. Geological Survey; June 1914 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 16 years (1914-15, 1919-26, 1927-35), 674 second-feet.
Extremes.- Maximum discharge during year, 21,000 second-feet July 10 (gage height, 13.12 feet); minimum, 89 second-feet Sept. 22 (gage height, 1.77 feet); minimum daily discharge, 107 second-feet Sept. 2.
1914-35: Maximum discharge, that of July 10, 1935; minimum, 32 second-feet Sept. 25, 1932 (gage height, 1.42 feet); minimum daily discharge, 54 second-feet Nov. 29, 1930.
Remarks.- Records fair except those estimated for periods of ice effect, Dec. 11-18, Dec. 30 to Jan. 7, Jan. 15 to Mar. 6, which are poor. Discharge estimated for period of recorder failure, Apr. 19, 20. Regulation from operation of power plants upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,340	362	7,610	550	280	540	840	808	272	295	319	113
2	965	472	7,430	520	270	500	800	692	258	258	414	107
3	752	420	3,100	540	260	500	745	657	250	232	477	124
4	657	858	2,200	450	250	520	828	692	254	216	483	238
5	532	1,550	1,650	430	240	580	1,010	692	286	220	426	602
6	674	1,320	1,370	430	230	1,000	912	692	371	232	366	520
7	832	1,140	1,190	450	220	1,700	760	1,090	324	220	350	387
8	708	938	974	720	220	1,420	692	1,320	314	358	360	295
9	589	824	920	1,060	220	1,150	768	1,060	615	4,850	334	241
10	513	708	864	1,500	220	1,060	880	974	650	13,800	305	258
11	460	636	830	1,320	220	1,140	920	880	483	4,870	281	224
12	426	582	810	1,000	220	2,030	1,020	768	387	2,450	272	192
13	392	538	720	816	220	1,840	1,040	708	329	1,770	254	178
14	366	520	650	792	240	1,460	1,000	700	290	610	329	181
15	345	460	580	700	500	1,240	992	650	258	938	324	200
16	329	448	540	660	900	1,230	1,060	582	232	992	305	192
17	319	448	530	630	750	1,700	1,030	526	228	896	305	174
18	319	443	540	610	600	1,550	1,000	472	430	685	263	170
19	305	437	698	590	500	1,320	980	437	520	582	241	160
20	295	420	1,320	580	420	1,190	956	420	602	715	228	156
21	295	404	1,080	580	370	1,370	856	414	513	563	236	160
22	300	404	848	650	350	1,460	808	392	1,010	483	228	151
23	290	438	700	560	340	1,240	768	382	858	507	212	160
24	295	822	608	510	340	1,240	722	382	643	650	188	146
25	280	808	556	470	350	1,090	664	366	544	671	224	134
26	296	678	602	440	650	965	622	345	443	657	181	127
27	319	602	606	410	850	864	582	329	371	520	160	127
28	329	622	657	390	650	872	570	310	382	426	137	130
29	329	856	589	360		1,140	563	295	340	376	127	138
30	308	1,360	650	330		1,020	878	286	345	345	118	170
31	305		600	300		904		286		324	116	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,340	280	466	1.45	1.67
November	1,550	362	684	2.12	2.36
December	7,610	530	1,355	4.21	4.85
January	1,500	300	624	1.94	2.24
February	900	220	389	1.21	1.26
March	2,030	500	1,156	3.59	4.14
April	1,060	563	842	2.61	2.91
May	1,320	286	600	1.86	2.14
June	1,010	228	427	1.33	1.48
July	13,800	216	1,313	4.08	4.70
August	483	116	276	.857	.99
September	602	107	204	.634	.71
The year	13,800	107	699	2.17	29.45

Lehigh River at Bethlehem, Pa.

Location.- Water-stage recorder, lat. 40°22'05", long. 75°21'55", 1,500 feet above Minsi Trail Bridge, at Bethlehem, Northampton County, and 2,000 feet below Monocacy Creek. Zero of gage is 208.50 feet above mean sea level.
Drainage area.- 1,280 square miles.
Records available.- September 1902 to February 1905, April 1909 to December 1913, October 1918 to September 1921, October 1928 to September 1935 in reports of U. S. Geological Survey; September 1902 to February 1905, April 1909 to September 1935 in reports of Pennsylvania Department of Forests and Waters. Records prior to October 1928 obtained at New Street Bridge 800 feet above Monocacy Creek.
Extremes.- Maximum discharge during year, 63,700 second-feet July 10 (gage height, 18.53 feet); minimum, 606 second-feet Aug. 31, Sept.1 (gage height, 2.28 feet); minimum daily discharge, 675 second-feet Sept. 1.
1902-5, 1909-35: Maximum discharge, 64,800 second-feet Aug. 24, 1933 (gage height, 18.70 feet); minimum, 160 second-feet Oct. 15, 1910 (gage height, 1.33 feet, former site and datum).
Maximum stage known, 25.9 feet, former site and datum, Feb. 28, 1902 (discharge, about 92,000 second-feet).
Extremes do not include flow of Lehigh Canal.
Remarks.- Records fair except those estimated for period of missing gage-height record, Sept. 8-19, which are poor. Regulation from power operations upstream. Daily and monthly records include flow of Lehigh Canal.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,120	1,190	19,000	2,020	1,310	2,380	2,530	2,300	871	1,530	1,520	675
2	3,810	1,440	22,600	1,850	1,240	2,360	2,460	1,950	858	1,200	2,220	695
3	3,100	1,370	12,600	1,820	1,520	2,460	2,330	1,860	870	1,090	1,890	847
4	2,780	2,030	8,830	1,740	1,570	2,400	2,180	1,770	897	987	2,220	1,750
5	2,390	4,850	6,720	1,340	1,340	2,270	2,250	1,790	936	1,010	1,760	3,950
6	3,250	3,810	5,540	1,600	1,260	2,400	2,490	1,830	1,030	1,040	1,510	2,370
7	3,440	3,440	4,710	1,970	1,070	3,320	2,270	1,960	1,120	1,000	1,480	1,760
8	2,890	2,890	4,050	2,940	1,120	3,320	2,110	2,580	972	1,480	1,520	1,530
9	2,540	2,580	3,440	3,800	1,340	2,770	2,330	2,270	1,230	20,100	1,390	1,340
10	2,300	2,350	3,200	5,110	1,420	2,570	2,570	2,090	1,690	46,000	1,270	1,400
11	2,170	2,190	2,890	4,300	1,430	2,670	2,490	2,040	1,330	18,200	1,350	1,230
12	2,030	2,080	2,450	3,550	1,280	3,920	2,570	1,850	1,120	10,400	1,250	1,150
13	1,860	1,980	2,650	2,980	1,220	4,840	2,770	1,780	985	7,470	1,180	1,080
14	1,720	1,910	2,410	2,770	1,540	3,920	2,670	1,760	881	5,640	1,190	1,000
15	1,670	1,740	2,180	2,160	4,130	3,430	2,570	1,720	806	4,310	1,210	1,130
16	1,580	1,660	2,170	2,370	3,920	3,430	2,670	1,560	743	4,450	1,150	1,070
17	1,500	1,610	2,160	2,220	4,170	3,800	2,770	1,500	806	3,780	1,080	1,000
18	1,470	1,580	2,000	2,160	3,460	3,800	2,680	1,370	827	3,060	1,070	920
19	1,410	1,560	2,280	1,820	2,490	3,430	2,560	1,300	1,630	2,610	998	844
20	1,320	1,500	4,840	1,900	2,250	3,200	2,490	1,290	1,630	2,740	963	852
21	1,270	1,440	3,430	2,160	1,870	3,550	2,370	1,250	1,500	2,570	974	820
22	1,390	1,410	2,880	2,670	1,870	4,040	2,280	1,200	1,450	2,260	1,070	788
23	1,320	1,450	2,570	2,480	1,760	3,550	2,170	1,170	1,980	2,160	963	778
24	1,250	2,250	2,380	1,530	1,630	3,550	2,080	1,160	1,590	2,630	896	746
25	1,190	2,300	2,220	1,540	1,820	3,320	1,980	1,100	1,350	2,430	809	736
26	1,200	2,010	2,480	1,750	3,920	2,980	1,840	1,090	1,190	2,260	863	725
27	1,270	1,860	2,670	1,680	3,600	2,770	1,720	1,050	1,110	1,960	820	695
28	1,270	2,000	2,150	1,400	2,480	2,570	1,710	1,000	1,080	1,730	820	725
29	1,230	2,680	2,340	1,460		3,090	1,660	975	1,180	1,610	746	746
30	1,190	4,460	2,250	1,520		2,880	2,120	923	2,110	1,480	756	725
31	1,130		1,670	1,310		2,570		946		1,440	685	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	5,120	1,130	2,002	1.56	1.80
November	4,850	1,190	2,187	1.71	1.91
December	22,600	1,670	4,637	3.62	4.17
January	5,110	1,310	2,255	1.76	2.03
February	4,170	1,070	2,073	1.62	1.69
March	4,840	2,270	3,147	2.46	2.84
April	2,770	1,660	2,323	1.81	2.02
May	2,580	923	1,562	1.22	1.41
June	2,110	743	1,192	.931	1.04
July	46,000	987	5,182	4.05	4.67
August	2,220	685	1,214	.948	1.09
September	3,950	675	1,136	.888	.99
The year	46,000	675	2,420	1.89	25.66

Tohickon Creek near Pipersville, Pa.

Location.- Water-stage recorder, lat. 40°26'00", long. 75°07'00", at highway bridge 1¼ miles northeast of Pipersville, Bucks County, and 4½ miles above mouth.
Drainage area.- 97.4 square miles.
Records available.- July to September 1935.
Extremes.- Maximum discharge during period, 3,980 second-feet Sept. 4 (gage height, 6.12 feet); minimum, 1.3 second-feet Sept. 26 (gage height, 0.56 foot); minimum daily discharge, 2.7 second-feet Sept. 26.
Remarks.- Records good. Regulation at low stages from operation of mills upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1											8.2	2.7
2											115	7.7
3											84	9.0
4											1,310	1,170
5											364	1,980
6											95	943
7											55	320
8											40	137
9											29	83
10											21	67
11											67	48
12											128	36
13											45	28
14											28	23
15											19	17
16											15	20
17											11	13
18										20	9.6	12
19										17	12	12
20										18	7.5	12
21										16	8.2	9.8
22										30	8.6	5.9
23										21	6.7	12
24										18	7.2	11
25										15	4.2	7.5
26										22	10	2.7
27										15	6.2	5.2
28										9.6	5.3	7.5
29										12	4.5	3.9
30										9.2	6.1	8.3
31										6.4	4.5	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October					
November					
December					
January					
February					
March					
April					
May					
June					
July 18-31	30	6.4	16.4	0.168	0.09
August	1,310	4.2	81.8	.840	.97
September	1,980	2.7	167	1.71	1.91
The year					

Neshaminy Creek near Langhorne, Pa.

Location.- Water-stage recorder, lat. 40°10'25", long. 74°57'30", at bridge on State Highway 213, half a mile below mouth of Mill Creek, and 1.7 miles west of Langhorne, Bucks County.
Drainage area.- 210 square miles.
Records available.- October 1934 to September 1935.
Extremes.- Maximum discharge during year, 3,640 second-feet Sept. 6; maximum gage height, 11.80 feet Feb. 15 (affected by ice); minimum discharge, 16 second-feet Aug. 31 (gage height, 0.73 foot); minimum daily discharge, 24 second-feet Aug. 31.
Maximum stage known, 17.3 feet Aug. 23, 1933 (discharge not determined).
Remarks.- Records good except those estimated for periods of ice effect, Dec. 10-18, Jan. 5-8, Jan. 24 to Feb. 17, which are fair. Regulation from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	700	84	942	806	230	350	162	118	43	42	37	26
2	370	89	559	634	240	483	158	98	41	38	140	28
3	226	86	288	290	260	668	140	98	41	34	135	31
4	191	149	523	184	230	399	132	98	44	30	1,340	124
5	165	336	396	160	200	343	129	89	48	32	277	1,490
6	1,430	212	248	150	180	370	155	91	71	30	116	2,350
7	741	218	215	150	170	361	155	270	87	26	86	728
8	341	155	184	170	170	392	143	134	61	32	82	244
9	256	126	152	204	190	296	470	135	100	732	75	168
10	211	113	130	446	210	260	418	110	94	755	63	155
11	194	110	115	487	180	296	237	113	71	408	56	124
12	174	108	105	263	160	742	222	96	58	145	61	106
13	152	100	100	184	155	1,900	366	86	49	98	52	93
14	138	93	98	184	190	730	260	84	50	82	50	86
15	132	86	98	172	2,500	488	204	80	48	72	56	84
16	124	84	98	176	1,500	406	211	71	41	66	38	78
17	116	82	100	155	1,800	343	201	69	41	70	49	74
18	110	80	90	152	1,130	280	168	67	44	68	43	68
19	106	80	498	138	721	256	152	62	72	53	39	63
20	100	78	904	243	579	260	140	60	119	55	42	62
21	96	78	268	480	378	314	132	57	88	62	43	59
22	138	75	197	874	343	373	129	56	67	77	49	56
23	113	75	177	508	301	252	121	62	58	65	64	55
24	100	104	162	400	280	241	113	45	56	66	52	48
25	91	157	149	330	410	211	110	53	45	84	35	48
26	93	103	260	300	1,360	197	98	50	40	147	34	44
27	93	89	398	280	851	177	96	50	37	66	30	47
28	98	86	187	260	417	183	89	44	36	54	28	46
29	91	100	327	250		276	91	43	49	47	25	47
30	86	700	260	240		201	110	44	46	41	27	45
31	82		160	230		168		44		36	24	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,430	82	228	1.09	1.26
November	700	75	135	.643	.72
December	942	90	271	1.29	1.49
January	874	138	306	1.46	1.68
February	2,500	155	548	2.61	2.72
March	1,900	168	394	1.88	2.17
April	470	89	177	.843	.94
May	270	43	83.1	.396	.46
June	119	36	58.2	.277	.31
July	755	26	117	.557	.64
August	1,340	24	105	.500	.58
September	2,350	26	223	1.06	1.18
The year	2,500	24	218	1.04	14.15

Schuylkill River at Pottstown, Pa.

Location.- Water-stage recorder, lat. 40°14'30", long. 75°39'05", at Hanover Street Bridge, at Pottstown, Montgomery County, one third of a mile below mouth of Manatawny Creek. Zero of gage is 117.81 feet above mean sea level.
Drainage area.- 1,147 square miles.
Records available.- October 1931 to September 1935 in reports of U. S. Geological Survey; August 1927 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Extremes.- Maximum discharge during year, about 31,000 second-feet July 10 (gage height, 14.89 feet); minimum, 348 second-feet Sept. 27 (gage height, 1.05 feet); minimum daily discharge, 461 second-feet Sept. 27.
1927-35: Maximum discharge (estimated), 44,200 second-feet Aug. 24, 1933 (gage height, 19.2 feet); minimum, 87 second-feet Aug. 13, 1930 (gage height, 0.43 foot); minimum daily discharge, 175 second-feet Sept. 19, 1932.
Remarks.- Records good except those for high stages and those estimated for period of ice effect, Jan. 29 to Feb. 11, which are fair. Regulation at low stages from operation of mills upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,500	1,030	11,100	1,760	1,250	2,880	1,880	1,760	730	1,040	959	535
2	4,900	1,220	16,700	1,690	1,150	2,740	1,880	1,500	678	902	1,750	563
3	3,790	1,090	9,000	1,640	1,300	2,740	1,760	1,640	670	822	2,260	648
4	3,180	1,200	6,640	1,500	1,400	2,530	1,640	1,510	706	760	1,640	2,680
5	2,670	3,370	5,080	1,280	1,250	2,320	1,580	1,390	854	715	1,760	3,180
6	3,930	3,250	4,200	1,240	1,150	2,260	1,940	1,370	894	655	1,510	2,260
7	4,030	3,020	3,630	1,530	1,050	2,390	1,820	1,640	910	612	1,130	1,650
8	3,020	2,460	3,100	2,260	1,000	2,460	2,150	1,700	790	1,220	1,120	1,020
9	2,670	2,260	2,600	2,880	1,150	2,260	4,540	1,410	1,040	11,800	1,030	902
10	2,320	2,000	2,320	3,710	1,350	2,000	5,080	1,350	1,160	27,000	918	918
11	2,060	1,820	2,200	3,480	1,550	2,130	4,540	1,380	894	12,000	1,070	854
12	1,880	1,700	1,820	2,950	1,530	3,060	4,120	1,300	768	6,000	1,040	782
13	1,700	1,530	2,000	2,530	1,330	3,870	3,950	1,250	818	4,720	950	738
14	1,580	1,510	1,880	2,320	1,570	3,480	3,480	1,260	700	3,870	918	715
15	1,460	1,430	1,640	1,940	4,410	3,250	3,180	1,230	619	3,320	895	692
16	1,380	1,330	1,580	1,880	5,270	3,180	3,100	1,160	511	3,400	914	685
17	1,350	1,270	1,530	1,880	5,840	3,020	2,810	1,090	563	3,180	814	678
18	1,280	1,260	1,500	1,820	4,900	2,810	2,530	1,060	577	2,600	775	576
19	1,190	1,230	2,090	1,580	3,630	2,600	2,320	995	745	2,260	745	554
20	1,180	1,160	3,790	1,530	3,180	2,670	2,130	950	1,130	2,130	730	570
21	1,120	1,150	2,530	1,760	2,670	2,880	2,000	950	846	2,200	730	605
22	1,170	1,110	2,130	2,260	2,460	3,020	1,940	926	738	1,640	752	556
23	1,140	1,160	1,940	2,390	2,260	2,600	1,880	934	907	1,390	760	514
24	1,080	1,980	1,760	1,520	2,000	2,600	1,760	894	846	1,340	678	487
25	1,050	1,640	1,640	1,430	2,130	2,600	1,640	838	752	1,530	626	487
26	1,040	1,380	2,020	1,760	3,670	2,390	1,510	894	775	1,580	619	487
27	1,090	1,320	2,320	1,760	4,920	2,200	1,460	854	768	1,300	584	461
28	1,390	1,390	1,880	1,580	3,250	2,200	1,420	752	715	1,130	584	507
29	1,200	1,580	2,000	1,450		2,530	1,390	775	692	1,040	598	487
30	1,050	3,220	1,940	1,500		2,200	1,820	814	684	977	570	487
31	968		1,530	1,350		1,940		782		934	570	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	7,500	968	2,109	1.84	2.12
November	3,370	1,030	1,702	1.48	1.65
December	16,700	1,500	3,422	2.98	3.44
January	3,710	1,240	1,941	1.69	1.95
February	5,840	1,000	2,451	2.14	2.23
March	3,870	1,940	2,639	2.30	2.65
April	5,080	1,390	2,442	2.13	2.38
May	1,760	752	1,173	1.02	1.18
June	1,160	511	783	.683	.76
July	27,000	612	3,357	2.93	3.38
August	2,260	570	968	.844	.97
September	3,180	461	876	.764	.85
The year	27,000	461	1,991	1.74	23.56

Schuylkill River at Philadelphia, Pa.

Location.- Water-stage recorder, lat. 39°58'00", long. 75°11'20", just above Fairmount Dam, at Philadelphia, Philadelphia County. Zero of gage is at 0.00 foot elevation, city of Philadelphia datum, or 5.23 feet above mean sea level, Sandy Hook datum.
Drainage area.- 1,893 square miles.
Records available.- January 1898 to December 1912, September 1931 to September 1935 in reports of U. S. Geological Survey; January 1903 to December 1912, September 1931 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 13 years (1903-12, 1931-35), 2,505 second-feet.
Extremes.- Maximum discharge during year, about 82,000 second-feet July 9 (gage height, 14.10 feet); minimum, 188 second-feet June 20, Aug. 1 (gage height, 5.70 feet); minimum daily discharge, 400 second-feet July 7.
1898-1912, 1931-35: Maximum gage height, about 14.8 feet Mar. 1, 1902 (discharge not determined); no flow over dam at times; minimum daily discharge, 38 second-feet Sept. 20, 1932.
Maximum stage known, about 17.0 feet Oct. 4, 1869 (discharge not determined).
Remarks.- Records good except those for extremely high stages, which are fair. Regulation from storage reservoirs upstream. Water supply for city of Philadelphia diverted above station not included in records except in part of monthly table. Record of diversion furnished by the city of Philadelphia.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12,500	1,120	12,800	2,120	1,430	4,490	2,520	2,370	680	900	912	424
2	7,240	1,230	19,400	3,490	1,390	4,380	2,470	1,870	553	806	1,560	624
3	5,470	1,430	12,200	2,570	1,600	4,840	2,370	1,920	545	624	3,220	622
4	4,380	1,500	9,100	2,300	1,920	4,320	2,110	2,020	626	631	5,070	5,120
5	3,660	3,480	7,300	1,860	1,830	3,820	2,070	1,730	714	570	2,900	16,400
6	6,060	4,490	5,700	1,730	1,470	3,660	2,370	1,640	982	502	2,020	8,800
7	7,060	4,700	5,010	1,920	1,180	3,660	2,680	2,070	857	400	1,600	4,850
8	4,780	3,440	4,320	2,310	1,190	3,820	2,420	2,780	894	717	1,200	2,780
9	3,820	2,890	3,660	3,600	1,390	3,600	6,960	2,070	1,060	42,500	1,150	1,870
10	3,270	2,570	3,160	6,100	1,690	3,110	7,480	1,690	1,340	30,900	984	1,600
11	2,890	2,310	2,580	5,990	2,110	3,110	6,290	1,830	1,140	19,000	796	1,430
12	2,630	2,210	2,580	4,610	2,070	4,550	5,590	1,600	776	8,200	1,360	1,230
13	2,310	1,870	2,680	3,710	1,830	7,840	5,760	1,520	648	5,820	1,140	1,120
14	2,020	1,780	2,520	3,270	2,080	6,290	5,070	1,340	745	4,840	871	928
15	1,920	1,690	2,260	2,680	8,820	5,360	4,550	1,300	542	3,990	1,100	946
16	1,780	1,560	2,070	2,520	10,800	4,890	4,210	1,230	440	3,660	1,840	820
17	1,690	1,520	2,020	2,570	11,900	4,550	3,990	1,280	422	4,210	933	808
18	1,640	1,430	1,970	2,470	10,100	4,160	3,540	1,140	516	3,320	666	784
19	1,520	1,420	2,410	2,160	6,820	3,760	3,160	995	616	2,780	652	648
20	1,390	1,240	6,550	2,070	5,650	3,660	2,890	1,030	1,050	2,470	674	640
21	1,340	1,200	4,440	2,680	4,610	3,880	2,630	952	1,050	3,050	634	628
22	1,430	1,200	3,220	4,440	3,990	4,550	2,520	928	818	2,370	698	611
23	1,430	1,310	2,780	4,250	3,660	3,880	2,420	907	612	1,780	682	557
24	1,320	1,910	2,570	2,890	3,270	3,540	2,260	892	838	1,630	646	512
25	1,260	2,570	2,310	2,020	3,320	3,540	2,070	821	666	1,790	523	480
26	1,210	1,970	2,470	2,160	6,540	3,220	1,920	794	556	1,970	522	466
27	1,260	1,600	4,040	2,370	8,380	3,000	1,780	858	620	1,690	497	448
28	1,390	1,560	2,890	2,020	5,590	2,890	1,690	734	800	1,230	432	506
29	1,730	2,210	3,000	1,730		3,380	1,640	659	586	1,120	418	451
30	1,390	5,540	2,950	1,830		3,270	2,020	694	580	921	478	526
31	1,190		2,420	1,640		2,680		743		892	502	

Month	Observed			Diversion	Corrected for diversion		
	Maximum	Minimum	Mean	(Mean)	Mean	Per square mile	Run-off in inches
October	12,500	1,190	2,999	240	3,239	1.71	1.97
November	5,540	1,120	2,165	238	2,403	1.27	1.42
December	19,400	1,970	4,625	237	4,862	2.57	2.96
January	6,100	1,640	2,841	235	3,076	1.62	1.87
February	11,900	1,180	4,165	237	4,402	2.33	2.43
March	7,840	2,680	4,055	234	4,289	2.27	2.62
April	7,480	1,640	3,315	240	3,555	1.88	2.10
May	2,780	659	1,368	246	1,614	.853	.98
June	1,340	422	742	252	994	.525	.59
July	42,500	400	5,009	254	5,263	2.78	3.20
August	5,070	418	1,183	251	1,434	.758	.87
September	16,400	424	1,921	236	2,157	1.14	1.27
The year	42,500	400	2,864	241	3,105	1.64	22.28

Little Schuylkill River at Tamaqua, Pa.

Location.- Water-stage recorder, lat. 40°48'20", long. 75°58'20", at Panther Valley Water Co. pumping plant, 0.6 mile above Tamaqua, Schuylkill County, and 0.8 mile above mouth of Panther Creek. Zero of gage is 817.46 feet above mean sea level.
Drainage area.- 42.9 square miles.
Records available.- October 1919 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; June 1916 to September 1935 in reports of Pennsylvania Department of Forests and Waters. Records prior to Oct. 1, 1928 obtained at a site 0.6 mile downstream.
Average discharge.- 17 years (1916-17, 1919-35), 93.8 second-feet.
Extremes.- Maximum discharge during year, 3,630 second-feet July 9 (gage height, 7.35 feet); minimum, 9.6 second-feet Sept. 30 (gage height, 1.58 feet); minimum daily discharge, 11 second-feet Sept. 24-27.
1916-35: Maximum discharge, 3,740 second-feet Aug. 24, 1933 (gage height, 7.50 feet); minimum, 1.8 second-feet Dec. 18, 1930 (gage height, 1.21 feet); minimum daily discharge, 3.0 second-feet Dec. 23, 1930.
Remarks.- Records good except those for extremely low stages and those estimated for periods of ice effect, Jan. 2-8, Jan. 24 to Feb. 15, and for period of recorder failure, Mar. 26-28, which are fair. Regulation from storage in Still Creek Reservoir. Water diverted above station not included in records except in part of monthly table. Record of diversion furnished by Panther Valley Water Co.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	128	38	1,140	57	32	82	79	54	24	76	57	36
2	103	34	778	54	33	86	72	53	25	66	66	35
3	88	26	435	52	35	92	76	52	24	55	57	41
4	76	203	298	50	33	85	72	46	26	51	79	74
5	65	162	282	48	31	74	71	47	25	50	54	60
6	93	169	312	47	29	83	74	54	29	50	48	29
7	70	134	218	52	28	90	68	62	24	44	56	26
8	56	115	158	70	27	88	79	55	23	78	50	24
9	51	103	131	110	27	73	145	52	45	2,200	44	23
10	49	90	90	103	27	71	169	58	31	1,110	41	23
11	47	83	81	101	27	88	189	55	24	499	43	20
12	44	76	76	83	27	126	184	54	22	306	40	17
13	41	70	67	83	28	115	164	54	19	214	37	17
14	40	65	66	85	30	96	158	51	18	154	37	16
15	38	57	62	73	130	92	151	49	16	160	34	18
16	37	55	60	68	113	108	142	47	15	196	33	16
17	36	52	58	62	112	118	118	42	18	108	31	14
18	35	51	54	57	75	106	115	41	86	92	30	15
19	32	48	105	57	65	96	118	40	56	77	31	16
20	32	43	113	57	60	96	110	37	50	113	31	22
21	33	43	70	61	54	146	106	39	42	76	34	16
22	35	44	60	76	54	123	105	37	83	74	35	15
23	30	57	57	61	52	134	84	37	60	78	33	12
24	29	86	54	52	52	140	72	37	55	77	30	11
25	28	60	52	45	78	134	65	34	52	65	28	11
26	31	56	91	40	245	120	60	35	44	61	26	11
27	32	60	80	37	110	118	54	32	41	54	29	11
28	36	75	76	35	81	120	52	28	37	55	28	13
29	31	97	80	34		112	58	26	112	49	32	14
30	26	271	66	33		82	75	27	107	49	34	12
31	23		56	32		76		27		47	35	

Month	Observed			Diversion	Corrected for diversion		
	Maximum	Minimum	Mean	(Mean)	Mean	Per square mile	Run-off in inches
October	128	23	48.2	8.50	56.7	1.32	1.52
November	271	26	84.1	6.26	90.4	2.11	2.35
December	1,140	52	172	8.32	180	4.20	4.84
January	110	32	60.5	10.5	71.0	1.66	1.91
February	245	27	60.5	7.95	68.4	1.59	1.66
March	146	71	102	3.39	105	2.45	2.82
April	189	52	103	6.91	110	2.56	2.86
May	62	26	43.9	9.85	53.8	1.25	1.44
June	112	15	41.1	15.3	56.4	1.31	1.46
July	2,200	44	206	10.6	217	5.06	5.83
August	79	26	40.1	6.39	46.5	1.08	1.24
September	74	11	22.3	8.57	30.9	.720	.80
The year	2,200	11	82.4	8.54	90.9	2.12	28.73

Perkiomen Creek at Graters Ford, Pa.

Location.- Water-stage recorder, lat. 40°13'45", long. 75°27'10", 1,650 feet above highway bridge at Graters Ford, Montgomery County, 2½ miles north of Collegeville. Zero of gage is 112.37 feet above mean sea level.
Drainage area.- 279 square miles.
Records available.- October 1931 to September 1935 in reports of U. S. Geological Survey; June 1914 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 11 years (1914-16, 1926-35), 412 second-feet.
Extremes.- Maximum discharge during year, about 41,200 second-feet July 9 (gage height, 18.26 feet); minimum, 22 second-feet July 5 (gage height, 1.04 feet); minimum daily discharge, 27 second-feet July 6, 7.
1914-35: Maximum discharge, that of July 9, 1935; minimum, 11 second-feet Sept. 25, 1932 (gage height, 0.91 foot).
Remarks.- Records good except those for extremely high stages and those estimated for periods of ice effect, Dec. 10-18, Jan. 16-20, Jan. 24 to Feb. 16, which are poor. Some regulation from operation of mills upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,190	111	2,890	716	220	519	209	188	50	54	63	60
2	631	187	1,490	711	230	622	209	141	44	44	202	60
3	448	126	774	441	240	892	177	188	40	34	269	83
4	330	376	1,150	374	250	582	161	161	54	28	2,980	5,520
5	265	673	688	276	230	468	158	144	58	30	470	4,140
6	1,870	548	495	204	220	553	349	148	71	27	194	1,830
7	1,090	516	408	222	210	546	246	300	68	27	144	754
8	503	296	318	352	210	605	330	366	57	305	141	377
9	352	222	250	513	220	389	1,470	192	134	18,600	115	267
10	276	188	200	2,080	230	330	872	151	141	2,140	97	262
11	250	180	170	1,060	240	414	492	148	84	846	368	192
12	218	169	160	550	220	1,620	464	122	65	420	221	147
13	165	144	155	356	200	1,720	648	111	76	351	122	125
14	154	141	150	336	240	1,040	434	115	76	241	96	114
15	148	122	145	320	4,000	765	364	105	53	173	84	108
16	138	116	140	250	3,200	656	371	88	48	177	85	102
17	122	114	150	220	3,520	495	330	83	43	143	75	91
18	125	111	190	290	1,570	358	270	78	46	114	64	79
19	116	108	720	260	1,070	318	227	69	58	102	59	77
20	108	102	1,300	200	806	335	204	67	106	207	62	71
21	99	105	442	457	486	548	184	72	85	215	71	75
22	116	105	324	1,290	421	524	180	68	67	131	77	71
23	115	114	276	668	358	335	169	65	64	139	75	67
24	103	644	250	450	325	313	158	66	53	118	65	71
25	291	341	227	350	702	270	148	64	55	105	57	56
26	101	204	684	300	2,500	240	128	61	40	126	52	58
27	131	169	535	270	1,030	209	119	59	58	103	59	59
28	206	194	445	260	607	226	119	54	65	80	59	53
29	158	550	339	250		430	112	47	49	68	57	57
30	117	3,090	326	240		268	238	47	53	65	53	61
31	105		249	230		214		55		65	56	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,870	99	324	1.16	1.34
November	3,090	102	336	1.20	1.34
December	2,890	140	517	1.85	2.13
January	2,080	200	468	1.68	1.94
February	4,000	200	848	3.04	3.17
March	1,720	209	542	1.94	2.24
April	1,470	112	318	1.14	1.27
May	366	47	117	.419	.48
June	141	40	65.4	.234	.26
July	18,600	27	815	2.92	3.37
August	2,960	52	212	.760	.88
September	5,520	53	503	1.80	2.01
The year	18,600	27	420	1.50	20.43

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Crum Creek at Woodlyn, Pa.

Location.- Water-stage recorder, lat. 39°52'45", long. 75°21'00", at highway bridge at Woodlyn, Delaware County, 2 miles northeast of Chester and 2½ miles above confluence with Delaware River. Zero of gage is 19.58 feet above mean sea level.
Drainage area.- 33.3 square miles.
Records available.- October 1931 to September 1935 in reports of U. S. Geological Survey; June 1931 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Extremes.- Maximum discharge during year, about 1,060 second-feet Sept. 4 (gage height, 6.22 feet); minimum, 1.5 second-feet July 5, 6; minimum daily discharge, 1.7 second-foot July 5, 6.
1931-35: Maximum discharge, about 1,420 second-feet Aug. 23, 1933 (gage height, 7.56 feet); minimum, 0.3 second-foot Aug. 21, 1932 (gage height, 0.52 foot).
Remarks.- Records good except those estimated for periods of ice effect, Dec. 10-17, Jan. 26 to Feb. 14, which are poor. Flow regulated by storage in Crum Creek Reservoir, 5 miles upstream. Water diverted from reservoir not included in records except in part of monthly table. Record of pumpage furnished by Philadelphia Suburban Water Co.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	5.4	88	75	22	51	39	32	17	4.5	13	6.8
2	15	9.7	46	63	22	56	46	21	6.8	2.9	107	7.0
3	10	8.5	25	23	21	55	34	45	6.8	2.1	34	22
4	11	9.0	50	47	21	47	31	38	17	2.1	19	278
5	6.4	10	32	15	20	48	39	32	27	1.7	17	414
6	78	74	21	14	20	48	67	35	34	1.9	9.6	347
7	54	50	24	23	20	47	46	88	22	2.1	5.4	106
8	18	26	21	26	20	48	81	58	26	2.1	11	57
9	14	24	12	28	21	42	210	30	53	299	9.9	48
10	12	9.6	10	38	23	43	89	31	28	108	6.8	49
11	14	12	8	40	25	54	52	38	17	29	5.8	35
12	23	24	7	27	22	80	50	25	12	16	7.0	33
13	20	10	6	15	20	141	52	24	13	10	7.3	30
14	11	8.5	6	57	33	79	45	26	9.9	10	5.8	28
15	8.8	8.1	6	24	125	60	46	25	9.9	9.9	19	28
16	6.8	5.4	6	7.1	140	54	57	15	9.4	9.4	155	25
17	9.2	5.8	6	7.8	165	67	41	19	7.8	9.9	37	24
18	6.5	5.8	14	37	112	35	21	20	12	9.9	16	22
19	5.5	9.7	53	16	76	36	16	15	34	9.3	12	24
20	9.1	12	101	36	61	44	27	9.4	35	9.8	28	28
21	2.8	8.3	24	66	54	50	30	15	15	9.9	23	21
22	25	12	25	106	54	49	34	18	23	8.8	28	24
23	32	13	24	98	56	44	30	12	35	34	24	20
24	30	63	26	85	51	50	29	16	12	14	10	14
25	25	22	18	38	54	36	36	17	9.9	57	7.3	18
26	20	7.8	37	30	78	41	24	11	5.0	52	5.8	18
27	6.6	11	44	27	88	35	23	12	3.4	20	4.1	20
28	8.2	16	9.0	26	57	49	32	10	6.7	12	4.5	20
29	13	27	46	27		59	22	11	5.4	14	9.5	25
30	6.5	113	37	25		44	68	13	5.9	11	5.8	18
31	3.1		15	23		39		14		6.3	7.3	

Month	Observed			Diversion	Corrected for diversion		
	Maximum	Minimum	Mean	(Mean)	Mean	Per square mile	Run-off in inches
October	78	2.8	17.5	11.5	29.0	0.871	1.00
November	113	5.4	20.7	11.7	32.4	.973	1.09
December	101	6	27.3	11.1	38.4	1.15	1.33
January	106	7.1	37.7	11.2	48.9	1.47	1.70
February	165	20	52.9	12.1	65.0	1.95	2.03
March	141	35	52.6	11.7	64.3	1.93	2.22
April	210	16	47.2	11.7	58.9	1.77	1.98
May	88	9.4	25.0	12.0	37.0	1.11	1.28
June	53	3.4	17.3	12.0	29.3	.880	.98
July	299	1.7	25.4	11.8	37.2	1.12	1.29
August	155	4.1	21.1	11.1	32.2	.967	1.11
September	414	6.8	60.3	11.7	72.0	2.16	2.41
The year	414	1.7	33.6	11.6	45.2	1.36	18.42

Ridley Creek at Moylan, Pa.

Location.- Water-stage recorder, lat. 39°54'05", long. 75°23'35", at Fox Bank Bridge, at Moylan, Delaware County, 1 mile south of Media. Zero of gage is 87.36 feet above mean sea level.
Drainage area.- 31.9 square miles.
Records available.- October 1931 to September 1935 in reports of U. S. Geological Survey; August 1931 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Extremes.- Maximum discharge during year, about 3,990 second-feet July 9 (gage height, 7.81 feet); minimum, 3.1 second-feet Sept. 2 (gage height, 0.48 foot); minimum daily discharge, 14 second-feet July 4, 5.
1931-35: Maximum discharge, that of July 9, 1935; minimum, 1.6 second-feet Oct. 2, 1932; minimum daily discharge, 3.8 second-feet Sept. 14, 1932.
Remarks.- Records good except those for extremely high stages, which are fair. Flow regulated by storage reservoir of Media Water Co., which diverts about 1.08 second-feet daily to supply borough of Media.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	20	73	97	37	57	45	44	25	18	38	16
2	25	23	52	55	42	63	45	49	22	16	60	22
3	23	19	38	39	44	59	41	57	22	15	28	31
4	20	60	60	31	41	52	41	48	33	14	26	428
5	20	41	41	34	37	52	44	45	33	14	21	344
6	101	112	34	33	35	52	74	46	43	15	20	313
7	43	48	33	36	33	52	49	103	29	15	23	77
8	28	31	31	38	36	54	115	57	30	35	23	52
9	26	28	28	40	39	47	256	43	60	1,090	21	51
10	24	26	27	47	49	47	94	45	36	67	20	52
11	22	26	27	41	45	57	70	55	28	38	19	40
12	21	25	25	33	41	96	72	39	25	32	19	39
13	20	23	27	31	38	136	73	38	23	26	19	37
14	22	24	27	32	83	75	62	38	20	25	19	36
15	19	21	25	26	286	62	58	35	21	25	60	35
16	18	22	28	30	161	57	56	33	20	25	65	30
17	18	23	28	36	186	53	52	32	21	25	28	30
18	21	22	27	38	100	48	50	31	24	24	21	32
19	20	22	110	32	80	49	48	30	41	22	23	29
20	17	21	79	45	68	50	47	29	42	26	24	32
21	19	22	40	84	58	55	45	30	27	26	37	31
22	21	21	36	130	58	52	46	32	37	30	31	29
23	20	26	35	65	58	48	45	29	54	35	27	26
24	19	63	33	51	57	49	44	30	26	29	20	31
25	18	31	31	59	60	45	43	28	22	86	18	29
26	19	26	48	51	91	45	40	27	21	47	18	25
27	22	25	40	43	76	43	40	26	21	30	18	25
28	22	28	34	40	58	52	40	25	26	25	19	25
29	21	38	55	44		63	40	24	19	23	16	25
30	20	41	41	39		47	59	24	20	22	18	24
31	18		32	39		44		26		20	19	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	101	17	24.5	0.768	0.89
November	112	19	31.9	1.00	1.12
December	110	25	40.2	1.26	1.45
January	130	26	46.4	1.45	1.67
February	286	33	71.4	2.24	2.33
March	136	43	56.8	1.78	2.05
April	256	40	61.1	1.92	2.14
May	103	24	38.6	1.21	1.40
June	60	19	29.0	.909	1.01
July	1,090	14	62.6	1.96	2.26
August	65	16	26.4	.828	.95
September	428	16	66.5	2.08	2.32
The year	1,090	14	46.1	1.45	19.59

Chester Creek near Chester, Pa.

Location.- Water-stage recorder, lat. 39°52'10", long 75°24'30", at Dutton Mill Bridge, 3 miles northwest of Chester, Delaware County. Zero of gage is 23.54 feet above mean sea level.
Drainage area.- 61.1 square miles.
Records available.- October 1931 to September 1935 in reports of U. S. Geological Survey; August 1931 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Extremes.- Maximum discharge during year, about 2,580 second-feet (gage height, 8.72 feet); minimum, 7.0 second-feet Oct. 24 (gage height, 0.55 foot); minimum daily discharge, 27 second-feet Aug. 30, 31.
1931-35: Maximum gage height, 11.48 feet Aug. 23, 1933 (discharge not determined); minimum discharge, 0.3 second-foot Aug. 7, 1934 (gage height, 0.28 foot); minimum daily discharge, 6.8 second-feet Sept. 11, 14, 1932.
Remarks.- Records good except those estimated for period of recorder failure, July 29 to Aug. 12, which are fair. Regulation from operation of mills upstream.

Daily and monthly discharge. in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	66	36	156	192	83	102	79	74	47	42	74	28
2	45	37	95	118	87	113	78	82	44	36	115	36
3	43	34	70	79	91	106	73	109	43	35	50	49
4	39	104	107	66	85	90	70	89	55	33	45	744
5	37	74	76	66	76	90	78	82	65	34	37	839
6	227	212	62	61	74	93	148	81	84	31	38	639
7	86	89	57	66	75	90	90	208	55	31	39	134
8	53	54	53	73	75	95	246	116	57	71	40	91
9	49	47	48	81	81	82	588	81	130	960	35	70
10	44	44	45	95	104	83	177	76	70	139	33	82
11	42	44	44	83	93	105	130	92	56	64	32	63
12	41	43	41	65	79	187	130	70	49	49	31	57
13	37	40	44	61	70	290	137	71	49	48	30	53
14	37	39	44	61	160	142	111	71	45	45	32	53
15	37	38	44	54	574	117	105	64	46	45	48	53
16	37	40	45	56	311	104	101	60	45	48	74	49
17	38	40	46	66	373	97	93	59	43	45	50	47
18	38	38	46	75	188	87	88	57	48	44	34	46
19	35	37	221	62	142	87	85	53	86	42	33	44
20	34	38	153	94	122	89	82	53	96	48	34	45
21	40	37	79	186	102	96	79	57	54	45	58	41
22	37	39	70	287	99	94	81	58	76	40	77	43
23	35	43	67	134	99	85	77	56	119	66	67	40
24	32	110	62	122	99	87	86	56	57	41	33	36
25	34	56	61	142	101	80	74	53	49	149	28	36
26	36	46	84	113	158	77	69	51	45	84	28	41
27	36	42	83	95	139	75	70	49	41	43	29	41
28	40	47	60	102	106	91	67	47	52	45	30	40
29	37	61	104	89		123	67	46	41	42	29	40
30	35	303	85	83		82	109	50	43	38	27	38
31	34		62	84		77		52		36	27	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	227	32	47.1	0.771	0.89
November	303	34	63.7	1.04	1.16
December	221	41	74.6	1.22	1.41
January	287	54	97.1	1.59	1.83
February	574	70	137	2.24	2.33
March	290	75	104	1.70	1.96
April	588	67	116	1.90	2.12
May	208	46	71.7	1.17	1.35
June	130	41	59.7	.977	1.09
July	960	31	81.3	1.33	1.53
August	115	27	43.1	.706	.81
September	839	28	121	1.98	2.21
The year	960	27	84.2	1.38	18.69

White Clay Creek near Newark, Del.

Location.- Water-stage recorder, lat. 39°42'00", long. 75°41'05", at Baltimore & Ohio Railroad bridge 3½ miles east of Newark, New Castle County. Zero of gage is about 12 feet above mean sea level.
Drainage area.- 87.8 square miles.
Records available.- November 1931 to September 1935.
Extremes.- Maximum discharge during year, about 3,790 second-feet July 8 (gage height, 12.25 feet); minimum, 32 second-feet Oct. 20 (gage height, 4.01 feet); minimum daily discharge, 44 second-feet Nov. 3.
1931-35: Maximum gage height, 16.05 feet Aug. 23, 1933 (discharge not determined); minimum discharge, 9.1 second-feet Sept. 18, 1932 (gage height, 3.71 feet); minimum daily discharge, 12 second-feet Sept. 18, 26, 1932.
Remarks.- Records good except those estimated for periods of ice effect, Dec. 16-18, Jan. 5-7, Jan. 20 to Feb. 13, and for period of recorder failure, July 8-16, which are poor. Regulation at low stages from operation of mills upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	88	48	226	246	130	133	114	110	68	60	66	48
2	63	50	157	164	130	141	114	114	65	54	63	60
3	56	44	97	103	140	139	108	137	65	52	65	84
4	54	88	139	90	130	119	103	119	69	52	65	1,010
5	50	95	100	80	120	121	103	112	74	52	59	1,600
6	191	195	84	78	115	122	171	118	105	65	55	1,080
7	102	108	76	80	110	117	122	427	76	88	66	205
8	69	70	72	89	110	119	339	164	78	350	68	58
9	61	62	69	95	120	107	898	122	159	1,600	61	138
10	55	59	64	128	140	110	242	122	97	1,000	58	143
11	55	59	60	105	120	152	131	163	78	400	55	107
12	51	56	57	86	110	293	179	112	70	200	56	97
13	47	54	56	78	100	406	179	114	68	130	54	94
14	48	52	55	80	253	183	152	112	62	110	69	90
15	50	51	55	74	991	156	143	100	63	100	66	87
16	48	50	55	74	406	143	139	94	61	105	352	82
17	48	51	57	82	491	133	130	90	58	94	69	76
18	48	51	55	95	257	119	122	86	81	82	58	76
19	48	51	305	76	187	119	119	86	342	76	61	76
20	46	49	219	135	160	121	117	81	249	81	61	75
21	47	50	98	274	133	150	115	98	92	119	215	75
22	48	50	89	360	131	143	114	92	102	258	105	75
23	47	52	87	350	130	126	110	87	82	315	97	74
24	46	107	80	280	126	126	108	87	69	98	63	65
25	47	69	76	230	124	115	103	81	65	167	56	63
26	48	59	99	200	205	114	100	78	59	167	52	65
27	48	58	99	130	177	103	100	72	96	94	54	65
28	51	62	80	170	137	131	100	72	177	78	55	65
29	50	82	122	160		171	100	72	70	75	51	66
30	47	329	100	150		119	154	70	69	69	52	61
31	46		73	140		112		72		68	52	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	191	46	58.2	0.663	0.76
November	329	44	75.4	.859	.96
December	305	55	98.9	1.13	1.30
January	360	74	146	1.66	1.91
February	991	100	196	2.23	2.32
March	406	107	144	1.64	1.89
April	898	100	163	1.86	2.08
May	427	70	112	1.28	1.48
June	342	58	85.6	1.09	1.22
July	1,600	52	202	2.30	2.65
August	352	51	76.7	.873	1.01
September	1,600	46	199	2.27	2.53
The year	1,600	44	130	1.48	20.11

Brandywine Creek at Chadds Ford, Pa.

Location.- Water-stage recorder, lat. 39°52'10", long. 75°35'35", at Pennsylvania Railroad bridge at Chadds Ford, Delaware County. Zero of gage is 150.19 feet above mean sea level.
Drainage area.- 287 square miles.
Records available.- October 1918 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; August 1911 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 24 years (1911-35), 372 second-feet.
Extremes.- Maximum discharge during year, 7,000 second-feet July 9 (gage height, 10.0 feet); minimum, 104 second-feet Aug. 29 (gage height, 0.83 foot); minimum daily discharge, 154 second-feet Sept. 1.
1911-35: Maximum discharge (estimated), 30,500 second-feet Mar. 5, 1920 (gage height, 15.0 feet); minimum, 18 second-feet Jan. 22, 1931 (gage height, 0.34 foot); minimum daily discharge, 50 second-feet Sept. 11, 13, 23, 1932.
Remarks.- Records good except those estimated for period of ice effect, Jan. 25 to Feb. 14, and for period of missing gage-height record, Mar. 12, 13, which are poor. Regulation at low stages from operation of mills upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	588	204	1,380	576	210	535	401	468	244	226	219	154
2	328	232	1,050	587	220	575	397	457	222	186	279	219
3	273	198	470	383	230	595	373	595	219	177	244	281
4	248	327	593	338	210	500	359	477	244	168	251	1,880
5	235	446	466	276	200	481	359	426	283	171	210	2,590
6	553	750	376	302	190	488	612	422	339	174	198	1,590
7	472	607	356	315	190	477	462	687	273	177	198	678
8	305	312	322	349	200	503	757	744	248	1,240	213	477
9	260	260	292	394	220	444	2,690	448	516	4,670	204	415
10	238	241	264	597	250	426	1,290	417	357	1,140	189	411
11	241	238	286	485	230	496	833	619	276	665	186	345
12	241	232	264	369	220	790	743	426	241	395	192	315
13	213	229	267	328	220	1,100	788	404	226	322	221	299
14	204	219	257	338	300	743	655	397	210	296	271	286
15	207	210	248	273	2,010	635	615	366	207	276	294	289
16	216	210	257	309	1,500	575	615	342	195	276	404	273
17	207	198	270	325	1,690	535	555	335	189	267	226	260
18	207	192	270	345	1,240	466	511	315	232	244	195	257
19	207	198	741	302	833	459	488	305	329	229	186	248
20	198	204	1,060	345	720	466	473	299	473	286	192	248
21	198	198	422	615	595	496	462	302	283	313	255	235
22	198	192	352	1,190	555	511	466	296	272	278	255	229
23	204	201	345	734	535	462	440	292	409	283	284	219
24	189	395	322	367	515	470	429	292	241	270	195	213
25	186	292	309	310	555	433	411	280	219	966	171	210
26	183	226	399	270	805	418	387	273	201	487	168	213
27	198	213	480	250	916	394	383	264	202	296	171	213
28	226	229	302	240	555	414	387	254	368	260	170	213
29	216	296	438	230		593	376	244	222	241	161	210
30	198	1,060	411	220		440	688	248	207	222	163	207
31	192		292	210		394		257		213	162	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	588	183	252	0.878	1.01
November	1,060	192	300	1.05	1.17
December	1,380	248	437	1.52	1.75
January	1,190	210	393	1.37	1.58
February	2,010	190	576	2.01	2.09
March	1,100	394	526	1.83	2.11
April	2,690	359	614	2.14	2.39
May	744	244	386	1.34	1.54
June	516	189	272	.948	1.06
July	4,670	168	497	1.73	1.99
August	404	181	217	.756	.87
September	2,590	154	456	1.59	1.77
The year	4,670	154	409	1.43	19.33

SUSQUEHANNA RIVER BASIN

North Branch of Susquehanna River at Binghamton, N. Y.

Location.- Chain gage, lat. 42°05'30", long. 75°54'55", at Washington Street Bridge, at Binghamton, Broome County, 500 feet upstream from mouth of Chenango River. Zero of gage is 821.49 feet above mean sea level.
Drainage area.- 2,290 square miles.
Records available.- July 1901 to December 1912, January 1915 to September 1935.
Extremes.- Maximum gage height during year, 17.83 feet July 9; minimum, 1.87 feet Aug. 28, Sept. 5.
1901-12, 1915-35: Maximum gage height, 18.0 feet (from graph based on gage readings) Mar. 16, 1929; minimum, 1.5 feet Sept. 20, 1908.
Maximum stage known, 23.5 feet Mar. 17, 1865.
Remarks.- Records good. Gage heights obtained at this station for flood-warning purposes. Discharge is not determined.

Daily mean gage-height in feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.06	2.42	5.90	2.54	6.30	4.58	5.53	4.79	2.34	2.37	2.76	1.98
2	2.84	2.46	9.17	2.46	5.94	4.14	5.38	4.55	2.33	2.29	2.72	1.93
3	2.66	2.48	7.43	2.56	5.87	3.96	5.20	4.10	2.31	2.23	2.52	1.94
4	2.52	2.49	5.88	2.46	5.72	4.52	4.70	4.40	2.27	2.19	2.48	1.92
5	2.44	2.98	4.96	2.80	5.30	4.54	4.35	5.21	2.32	2.16	2.40	1.90
6	2.45	3.30	4.40	2.52	4.84	7.06	4.28	5.13	2.29	2.15	2.36	1.94
7	2.61	3.28	4.02	2.67	4.42	9.07	4.37	6.52	2.29	2.05	2.36	1.98
8	2.70	3.24	3.62	3.80	4.24	8.18	4.23	9.44	2.32	10.62	2.33	1.95
9	2.61	3.30	3.07	10.10	4.02	6.10	4.23	8.03	2.34	17.30	2.27	1.94
10	2.48	3.24	2.82	16.45	3.92	5.11	4.49	7.07	2.41	14.00	2.26	1.96
11	2.42	3.12	3.16	14.30	3.88	5.39	5.65	6.15	2.39	8.75	2.24	2.10
12	2.35	2.99	3.27	10.80	3.57	8.64	6.15	5.13	2.35	6.18	2.22	2.13
13	2.33	2.93	2.79	6.71	3.40	8.34	5.23	4.33	2.30	5.34	2.29	2.26
14	2.32	2.88	2.77	5.48	3.35	6.38	5.73	4.23	2.21	4.78	2.28	2.24
15	2.34	2.83	2.76	4.48	3.32	5.17	5.79	3.93	2.15	4.12	2.28	2.16
16	2.30	2.80	2.74	4.12	3.78	5.27	6.13	3.71	2.09	3.70	2.25	2.10
17	2.25	2.80	2.74	4.14	6.06	7.73	5.73	3.47	2.09	3.90	2.20	2.11
18	2.24	2.90	2.84	4.08	7.00	8.57	5.47	3.32	2.11	3.64	2.16	2.09
19	2.24	2.98	2.74	3.92	5.84	7.15	6.17	3.13	2.13	3.18	2.15	2.08
20	2.22	3.11	3.14	3.64	4.86	6.12	5.77	3.03	2.62	3.02	2.12	2.07
21	2.20	3.04	3.44	3.78	4.48	7.28	6.37	2.90	2.49	3.16	2.08	2.16
22	2.19	2.91	3.40	5.00	4.04	8.18	5.67	2.86	2.43	3.01	2.08	2.12
23	2.22	2.90	3.08	5.16	3.91	6.82	5.03	2.75	2.42	2.78	2.06	2.08
24	2.29	3.88	2.92	4.45	3.68	6.80	4.69	2.68	2.50	3.34	2.08	2.07
25	2.42	4.18	2.77	7.60	3.64	6.42	4.31	2.62	2.65	4.77	2.04	2.04
26	2.38	3.86	2.80	10.00	4.13	5.58	3.95	2.56	2.87	3.96	1.99	2.00
27	2.44	3.39	2.84	9.20	5.29	4.83	3.68	2.49	2.73	3.30	1.96	2.10
28	2.42	3.26	2.91	8.29	5.27	4.58	3.57	2.44	2.48	2.92	1.90	2.12
29	2.47	3.22	2.65	7.86		5.42	3.45	2.45	2.48	2.80	1.92	2.11
30	2.45	3.18	2.80	7.20		6.56	3.97	2.41	2.50	2.96	1.94	2.09
31	2.42		3.02	6.88		6.56		2.35		2.88	1.96	

North Branch of Susquehanna River at Towanda, Pa.

Location.- Wire-weight gage, lat. 41°45'55", long. 76°26'25", at Bridge Street Bridge, at Towanda, Bradford County. Zero of gage is 693.85 feet above mean sea level. Chain gage at same site and datum used prior to Oct. 17, 1934.
Drainage area.- 7,797 square miles.
Records available.- October 1918 to October 1920, October 1931 to September 1935 in reports of U. S. Geological Survey; December 1892 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 17 years (1918-35), 9,937 second-feet.
Extremes.- Maximum discharge during year, 144,000 second-feet July 9 (gage height, 21.1 feet, from graph based on gage readings); minimum, 1,460 second-feet Sept. 28, 29.
1892-1935: Maximum discharge, about 182,000 second-feet Mar. 2, 1902 (gage height, 24.5 feet); minimum, 538 second-feet Dec. 3, 1930 (gage height, -0.15 foot); minimum daily discharge, 613 second-feet Oct. 22, 23, Nov. 29, 1930.
Maximum stage known, 25.0 feet Mar. 17, 1865 (discharge, about 188,000 second-feet).
Remarks.- Records good except those estimated for periods of ice effect, Jan. 1-8, Jan. 27 to Feb. 15, which are fair.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8,400	2,980	15,900	3,500	5,100	9,600	26,600	15,000	2,980	2,570	5,880	1,720
2	6,500	2,840	41,500	3,400	5,100	8,010	23,000	15,000	2,840	2,440	5,880	1,630
3	5,410	2,980	34,400	3,600	5,200	10,000	22,000	13,000	2,700	2,190	5,160	1,540
4	4,370	3,410	27,800	3,400	5,000	14,500	19,000	12,500	2,570	1,960	4,300	1,630
5	3,880	5,410	21,500	3,200	4,700	12,500	16,000	18,500	2,570	1,850	4,140	1,630
6	3,410	6,500	15,500	3,500	4,500	17,200	15,500	18,500	2,700	1,750	3,510	1,720
7	3,120	7,250	13,000	6,400	4,300	33,500	16,000	26,000	2,570	1,650	3,510	1,820
8	3,410	8,010	10,500	15,000	4,200	29,600	15,000	52,200	2,700	14,800	3,510	1,720
9	3,880	8,400	8,400	34,200	4,300	22,000	15,000	41,000	2,840	123,000	3,210	1,720
10	3,260	8,400	6,130	89,900	4,100	17,500	18,000	33,200	3,260	108,000	3,360	1,820
11	2,980	7,630	5,410	85,200	3,800	19,000	33,800	29,600	3,260	60,500	7,900	2,260
12	2,700	6,870	4,370	59,200	3,600	42,200	51,800	22,000	2,700	30,200	10,200	2,380
13	2,310	6,500	4,710	33,800	3,600	41,000	45,200	18,000	2,440	19,700	5,520	2,260
14	2,310	6,130	4,540	21,000	4,000	29,000	36,800	15,500	2,310	17,700	4,810	2,140
15	2,190	5,770	4,370	16,000	5,410	20,000	33,800	13,500	2,070	14,700	4,140	1,920
16	2,070	5,410	4,710	13,000	6,870	20,000	31,400	11,500	1,850	12,700	3,660	1,720
17	2,070	5,410	4,710	10,000	12,000	33,200	27,200	10,000	1,750	11,700	3,510	1,820
18	2,070	6,130	4,370	10,500	13,000	39,800	24,800	8,800	1,750	10,200	3,510	2,030
19	1,960	6,500	4,370	9,600	12,000	32,000	26,600	7,630	1,960	8,600	3,060	1,920
20	1,850	7,250	4,710	9,200	8,800	24,800	26,000	6,870	2,310	7,020	2,640	1,920
21	1,750	7,630	7,250	8,800	7,250	29,600	25,400	6,130	3,410	6,630	2,380	1,920
22	1,850	6,870	8,400	17,500	6,500	43,800	22,000	5,770	3,260	6,630	2,260	1,820
23	1,850	6,130	6,870	21,000	5,410	32,600	19,000	5,410	3,720	5,880	2,640	1,820
24	1,960	12,600	6,130	16,500	5,060	30,200	17,000	4,710	4,710	5,520	2,640	1,720
25	2,190	16,500	5,410	10,000	5,060	27,800	14,500	4,540	4,200	10,200	2,140	1,630
26	2,700	14,000	5,060	8,400	8,390	23,600	12,500	4,040	4,370	15,200	2,030	1,540
27	2,840	11,000	4,370	7,400	17,000	19,000	11,000	3,880	4,370	10,700	1,920	1,540
28	2,980	9,200	4,040	6,600	11,500	16,000	9,600	3,560	3,720	7,800	1,820	1,460
29	2,980	8,800	4,370	6,100		22,500	9,200	3,410	3,120	6,250	1,720	1,460
30	3,120	9,600	4,370	5,600		25,400	9,600	3,260	2,700	7,020	1,820	1,540
31	3,120		3,720	5,300		33,800		3,120		6,630	1,720	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	8,400	1,750	3,080	0.395	0.46
November	16,500	2,840	7,404	.950	1.06
December	41,500	3,720	9,706	1.24	1.43
January	89,900	3,200	17,640	2.26	2.61
February	17,000	3,600	6,634	.851	.89
March	43,800	8,010	25,150	3.23	3.72
April	51,800	9,200	22,400	2.88	3.21
May	52,200	3,120	14,070	1.80	2.08
June	4,710	1,750	2,924	.375	.42
July	123,000	1,650	17,470	2.24	2.58
August	10,200	1,720	3,694	.474	.55
September	2,380	1,460	1,792	.230	.26
The year	123,000	1,460	11,060	1.42	19.27

North Branch of Susquehanna River at Wilkes-Barre, Pa.

Location.- Water-stage recorder, lat. 41°15'00", long. 75°53'10", at Market Street Bridge, at Wilkes-Barre, Luzerne County. Zero of gage is 511.94 feet (revised) above mean sea level.
Drainage area.- 9,960 square miles.
Records available.- March 1899 to December 1913, October 1918 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; November 1890 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 36 years (1899-1935), 13,510 second-feet.
Extremes.- Maximum discharge during year, 151,000 second-feet July 10 (gage height, 25.39 feet); minimum, 1,830 second-feet Sept. 30 (gage height, 1.65 feet).
1890-1935: Maximum discharge, about 213,000 second-feet (revised) Mar. 2, 1902 (gage height, 31.4 feet); minimum, 820 second-feet Sept. 12, 16, 17, 20, 1913.
Maximum stage known, 33.1 feet Mar. 18, 1865 (discharge, about 232,000 second-feet).
Remarks.- Records good except those estimated for period of ice effect, Jan. 27 to Feb. 15, which are fair. Discharge based on chain-gage readings for periods of recorder failure, Aug. 30 to Sept. 4, Sept. 8-12, 17-19, 21-30.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12,200	3,980	26,800	4,540	6,500	14,300	34,700	15,000	4,310	3,780	7,540	2,300
2	11,600	3,880	56,600	4,310	6,200	12,900	29,200	17,300	4,090	3,380	7,540	2,300
3	9,500	3,880	53,100	3,980	6,600	12,600	26,700	16,900	3,880	3,190	7,280	2,300
4	7,800	4,200	40,100	4,090	6,200	14,800	24,200	15,700	3,670	2,930	7,020	2,380
5	6,760	7,570	28,800	3,780	5,800	19,400	20,600	16,500	3,570	2,680	6,380	2,600
6	6,000	8,640	22,000	3,470	5,400	21,400	18,500	20,600	3,570	2,520	5,750	2,760
7	6,250	10,100	18,500	4,660	5,200	40,100	17,700	23,500	3,570	2,600	5,250	2,520
8	5,500	10,700	15,700	7,280	4,900	41,300	17,300	50,300	3,670	2,600	4,770	2,450
9	5,380	10,400	12,900	17,500	5,000	32,000	17,300	59,400	3,980	43,900	4,540	2,380
10	5,250	10,400	10,100	65,400	4,700	24,700	18,500	47,100	4,290	142,000	4,310	2,380
11	4,890	10,100	8,360	103,000	4,500	22,800	28,200	42,600	5,130	115,000	4,200	2,380
12	4,310	9,200	6,500	84,400	4,400	36,000	57,400	33,600	4,660	56,200	6,500	2,450
13	3,880	8,360	6,000	58,000	4,300	55,200	63,700	25,700	4,200	31,600	11,200	2,760
14	3,570	8,080	5,880	35,300	4,300	42,600	55,200	21,500	3,890	25,200	7,540	2,840
15	3,380	7,540	6,000	23,800	5,000	30,800	47,100	18,100	3,570	22,000	6,120	2,600
16	3,280	7,020	6,000	18,500	7,000	25,200	43,900	15,700	3,280	17,300	5,250	2,450
17	3,190	6,760	6,380	15,400	10,700	31,500	39,500	14,000	3,020	14,600	5,010	2,300
18	3,100	6,760	6,120	14,300	13,200	44,500	33,600	12,200	2,840	13,600	4,540	2,230
19	2,930	7,020	5,750	12,200	14,000	43,900	32,500	11,000	2,840	11,900	4,310	2,230
20	2,840	7,540	6,620	12,200	14,300	35,300	32,500	9,800	2,930	10,700	3,980	2,450
21	2,760	8,360	8,360	12,200	11,800	31,400	32,000	8,920	3,190	9,200	3,570	2,300
22	2,760	8,360	9,500	17,200	9,500	45,800	29,800	8,080	4,060	8,080	3,280	2,380
23	2,760	8,080	10,400	24,700	8,640	47,100	25,200	7,540	5,130	7,540	3,020	2,300
24	2,760	9,580	9,200	22,800	7,540	38,300	22,000	7,020	4,890	7,540	2,930	2,300
25	2,680	16,900	8,360	15,600	6,500	35,300	18,900	6,500	5,620	7,280	2,930	2,230
26	2,930	17,300	7,540	12,200	9,830	31,400	16,500	6,000	5,750	9,420	2,930	2,090
27	3,280	14,600	6,380	10,500	14,000	26,200	14,600	5,620	5,380	14,600	2,760	2,020
28	3,670	12,600	5,500	9,000	16,600	21,500	12,900	5,250	5,130	12,900	2,600	1,960
29	3,780	11,300	5,620	8,000		22,400	11,900	4,890	5,130	10,100	2,450	1,960
30	3,880	11,600	4,890	7,500		26,700	11,900	4,770	4,420	8,360	2,230	1,830
31	3,880		5,130	7,000		33,000		4,540		7,540	2,230	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	12,200	2,680	4,734	0.475	0.55
November	17,300	3,880	9,027	.906	1.01
December	56,600	4,890	13,840	1.39	1.60
January	103,000	3,470	20,740	2.08	2.40
February	16,600	4,300	7,950	.798	.83
March	55,200	12,600	30,980	3.11	3.58
April	63,700	11,900	28,470	2.86	3.19
May	59,400	4,540	17,920	1.80	2.08
June	5,750	2,840	4,142	.416	.46
July	142,000	2,520	20,330	2.04	2.35
August	11,200	2,230	4,837	.486	.56
September	2,840	1,830	2,348	.236	.26
The year	142,000	1,830	13,850	1.39	18.87

North Branch of Susquehanna River at Danville, Pa.

Location.- Wire-weight gage, lat. 40°57'25", long. 76°37'20", at highway bridge at Danville, Montour County. Zero of gage is 431.07 feet (revised) above mean sea level.
Drainage area.- 11,220 square miles.
Records available.- March 1899 to December 1913, October 1918 to September 1921, July 1932 to September 1935 in reports of U. S. Geological Survey; March 1899 to December 1903, March 1905 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 32 years (1899-1900, 1901-3, 1905-31, 1932-35), 15,140 second-feet.
Extremes.- Maximum discharge during year, 153,000 second-feet July 11 (gage height, 20.0 feet, from graph based on gage readings); minimum, 2,120 second-feet Sept. 30 (gage height, 2.34 feet).
1899-1935: Maximum discharge, about 242,000 second-feet (revised) Mar. 3, 1902; maximum gage height, 30.7 feet Mar. 9, 1904 (affected by ice); minimum discharge, 830 second-feet Sept. 23-25, 1900 (gage height, 1.6 feet).
Maximum stage known, 28 feet Mar. 18, 1865 (discharge, about 258,000 second-feet).
Remarks.- Records fair. Discharge estimated for days of missing gage-height record, Dec. 7, Jan. 3, 14, 16, 28, Feb. 1, May 31, June 21, Sept. 18, and for periods of ice effect, Jan. 6, 7, Feb. 4-16.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13,900	4,800	40,800	5,570	8,000	13,300	43,300	17,200	5,180	5,180	8,480	2,530
2	16,700	4,800	84,100	4,900	7,200	15,100	36,100	18,900	4,800	4,430	10,300	2,530
3	14,100	4,800	72,400	4,080	8,050	15,600	31,700	21,200	4,800	4,080	8,920	2,680
4	11,600	5,180	55,400	3,920	7,200	15,600	28,900	19,400	4,430	3,750	8,050	2,970
5	9,360	9,360	40,800	4,430	6,800	18,900	25,500	19,400	4,430	3,430	7,200	3,750
6	8,480	11,600	31,000	4,100	6,400	22,400	22,400	22,400	4,430	3,280	6,370	3,590
7	9,050	12,100	24,200	4,700	6,000	36,100	20,600	27,500	4,430	3,120	5,970	3,280
8	7,620	13,600	20,600	7,620	5,800	46,600	20,000	45,500	4,430	3,590	5,570	2,820
9	6,780	13,100	17,200	12,600	5,600	40,000	21,800	69,200	5,180	20,800	5,180	2,680
10	6,370	12,600	13,600	43,300	5,800	32,500	25,500	59,000	5,970	138,000	4,800	2,820
11	6,370	12,600	12,600	100,000	5,400	27,500	28,200	52,700	6,370	134,500	4,800	2,680
12	5,570	11,600	11,600	98,400	5,300	34,400	50,800	45,000	5,570	80,600	4,800	2,680
13	5,180	11,200	8,050	69,400	5,200	61,700	72,400	39,200	5,180	45,800	9,360	2,530
14	4,800	10,300	10,300	45,800	5,100	54,500	66,500	28,200	4,800	31,000	9,810	3,120
15	4,430	9,360	8,050	28,900	6,000	39,200	58,100	23,600	4,080	28,200	7,620	3,120
16	4,080	8,920	7,200	23,000	8,500	31,700	52,700	20,000	3,920	22,400	6,370	2,820
17	3,920	8,480	7,200	16,100	12,100	32,500	50,100	17,800	3,590	17,200	5,970	2,680
18	3,920	8,050	7,620	14,600	14,600	45,000	43,300	15,100	3,920	16,100	5,180	2,530
19	3,750	8,050	7,200	14,600	15,100	51,800	40,800	13,600	4,080	13,600	4,800	2,390
20	3,590	8,050	8,480	13,100	15,600	45,000	38,400	12,100	4,080	13,600	4,430	2,530
21	3,430	8,920	9,810	13,100	14,100	37,700	37,700	11,200	4,080	11,200	4,430	2,820
22	3,430	9,360	8,920	14,600	11,600	45,800	36,900	9,810	4,800	9,360	3,920	2,530
23	3,430	9,810	11,200	22,400	9,810	58,100	32,500	9,360	6,780	8,920	3,430	2,530
24	3,430	11,200	10,700	29,600	9,810	46,600	27,500	8,480	6,780	9,360	3,280	2,530
25	3,280	15,100	9,810	24,200	7,620	41,700	23,600	8,050	6,780	9,360	3,120	2,530
26	3,280	22,400	8,920	18,700	11,200	39,200	20,600	7,200	7,200	9,360	3,120	2,390
27	3,750	20,000	9,360	14,600	15,600	32,500	18,300	6,780	6,780	14,600	3,120	2,250
28	4,080	17,200	7,200	12,000	15,600	28,200	16,100	6,370	6,370	15,100	2,970	2,250
29	4,430	15,100	6,370	8,920		25,500	13,600	5,970	6,370	11,600	2,680	2,250
30	4,430	14,600	6,780	9,810		29,600	15,100	5,570	6,370	9,360	2,530	2,120
31	4,800		5,970	8,920		31,700		5,180		8,050	2,530	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	18,900	3,280	6,301	0.562	0.65
November	22,400	4,800	11,070	.987	1.10
December	84,100	5,970	18,820	1.68	1.94
January	100,000	3,920	22,380	1.99	2.29
February	15,600	5,100	9,110	.812	.85
March	61,700	15,100	35,520	3.17	3.66
April	72,400	13,600	33,970	3.03	3.38
May	69,200	5,180	21,640	1.93	2.22
June	7,200	3,590	5,199	.463	.52
July	138,000	3,120	22,870	2.04	2.35
August	10,300	2,530	5,455	.486	.56
September	3,750	2,120	2,698	.240	.27
The year	138,000	2,120	16,340	1.46	19.79

Susquehanna River at Sunbury, Pa.

Location.- Wire-weight gage, lat. 40°50'55", long. 76°48'20", at highway bridge at Sunbury, Northumberland County. Zero of gage is 419.00 feet above mean sea level. Staff and chain gages with same datum at a site 3,700 feet upstream used prior to Nov. 22, 1934.
Drainage area.- 18,300 square miles.
Records available.- August 1916 to September 1935.
Extremes.- Maximum gage height during year, 11.7 feet, from graph based on gage readings, July 11; minimum, 0.78 foot Sept. 30.
1916-35: Maximum gage height, 18.0 feet Mar. 14, 1920; minimum, 0.32 foot Sept. 25-27, 1932.
Maximum stage known, 22.5 feet in March 1865.
Remarks.- Records good. Gage heights obtained at this station for flood-warning purposes. Discharge is not determined.

Daily mean gage-height in feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.30	1.68	7.14	2.13	1.96	3.67	5.34	3.22	1.75	1.74	2.20	0.96
2	4.12	1.68	10.34	2.06	2.00	3.41	4.95	3.36	1.69	1.56	2.27	.94
3	3.67	1.60	8.56	2.00	1.99	3.57	4.56	3.49	1.62	1.45	2.16	.97
4	3.14	1.82	7.24	2.10	2.09	3.86	4.34	3.42	1.57	1.36	2.10	1.02
5	2.78	2.69	6.00	2.09	2.28	4.24	4.04	3.79	1.56	1.28	1.94	1.14
6	2.52	3.18	5.04	2.12	2.09	4.64	3.78	4.05	1.54	1.25	1.92	1.27
7	2.43	3.44	4.48	1.83	1.69	5.75	3.60	4.55	1.57	1.21	1.83	1.19
8	2.32	3.51	4.02	1.87	1.77	6.91	3.52	6.22	1.56	1.30	1.76	1.24
9	2.13	3.36	3.57	2.95	1.71	6.25	3.76	8.74	1.64	2.16	1.70	1.18
10	2.02	3.24	3.17	5.60	1.77	5.35	4.16	7.72	1.83	10.48	1.68	1.12
11	1.98	3.10	2.82	10.45	1.93	4.85	4.39	7.61	1.87	10.84	1.74	1.06
12	1.90	2.99	2.34	9.79	1.87	5.41	5.91	7.17	1.76	7.62	1.84	.98
13	1.79	2.81	2.50	7.62	1.89	7.95	7.84	5.94	1.64	5.24	2.16	.98
14	1.62	2.74	2.40	5.95	1.86	7.66	7.55	5.16	1.51	4.10	2.44	1.02
15	1.55	2.61	2.36	4.71	1.98	6.23	6.90	4.66	1.44	3.88	2.06	1.06
16	1.48	2.52	2.38	4.12	2.43	5.39	6.54	4.17	1.36	3.50	1.86	1.04
17	1.43	2.42	2.30	3.73	1.89	5.31	6.25	3.81	1.31	3.08	1.73	.94
18	1.41	2.32	2.34	3.35	3.36	6.29	5.69	3.50	1.34	2.80	1.70	.91
19	1.39	2.29	2.33	3.07	3.18	6.67	5.27	3.20	1.50	2.63	1.59	.88
20	1.35	2.27	2.48	2.86	3.01	6.04	5.09	2.98	1.50	2.47	1.58	.96
21	1.29	2.40	2.62	2.75	2.88	5.60	5.00	2.81	2.00	2.34	1.46	.97
22	1.26	2.39	2.54	2.99	2.62	6.29	4.88	2.64	2.02	2.12	1.45	.96
23	1.26	2.50	2.65	3.95	2.32	7.17	4.54	2.50	2.10	2.00	1.32	.94
24	1.26	2.96	2.68	4.37	2.28	6.44	4.18	2.40	2.33	2.02	1.19	.96
25	1.26	3.76	2.51	3.61	2.07	6.01	3.86	2.32	2.28	2.20	1.18	.98
26	1.26	4.36	2.43	2.97	2.33	5.64	3.58	2.18	2.32	2.44	1.18	.91
27	1.35	4.06	2.36	2.71	3.29	5.12	3.35	2.08	2.18	3.20	1.16	.86
28	1.49	3.70	2.24	2.41	3.63	4.63	3.12	1.98	2.05	2.34	1.11	.82
29	1.58	3.54	2.16	2.31	3.67	4.52	2.94	1.90	1.94	2.77	1.02	.87
30	1.53	3.82	2.38	2.24		4.68	2.92	1.84	1.91	2.34	.98	.79
31	1.63		2.16	2.21		4.78		1.81		2.14	.95	

Susquehanna River at Harrisburg, Pa.

Location.- Water-stage recorder, lat. 40°15'10", long. 76°52'30", at Nagle Street, 500 feet above sanitary dam, and at Market Street Bridge, 3,700 feet above sanitary dam, and wire-weight gage at Walnut Street Bridge, 500 feet above Market Street, in Harrisburg, Dauphin County. Zero of gages is 290.04 feet above mean sea level.
Drainage area.- 24,100 square miles.
Records available.- October 1890 to September 1935.
Discharge.- 45 years (1890-1935): Average, 34,630 second-feet: 90 percent of time, 5,560 second-feet.
Extremes.- Maximum discharge during year, 242,000 second-feet Dec. 2 (Nagle Street gage height, 13.06 feet; Walnut Street gage height, 14.35 feet); minimum, 4,010 second-feet Sept. 30 (Nagle Street gage height, 3.12 feet; Walnut Street gage height, 3.16 feet).
1890-1935: Maximum discharge, about 613,000 second-feet May 22, 1894 (gage height, 25.7 feet at Walnut Street); minimum, about 1,600 second-feet Nov. 29, 1930 (Nagle Street gage height, 2.48 feet; Walnut Street gage height, 2.56 feet).
Maximum stage known, 26.8 feet at Walnut Street June 2, 1889 (discharge, about 699,000 second-feet).
Remarks.- Records excellent except those estimated for periods of ice effect, Dec. 11-17, Dec. 31 to Jan. 10, Jan. 24 to Feb. 17, which are fair.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	53,600	10,200	117,000	17,000	15,000	44,700	58,300	29,100	13,900	13,500	17,000	5,080
2	47,600	10,600	224,000	16,000	17,000	44,700	61,400	31,600	13,100	11,600	16,600	5,200
3	42,000	10,800	182,000	15,000	18,000	46,100	55,100	34,000	12,100	9,880	17,400	5,420
4	34,000	11,600	138,000	16,000	17,000	56,700	49,000	36,600	11,700	8,650	16,600	6,000
5	28,900	21,100	104,000	15,000	19,000	56,700	46,100	37,900	11,400	8,050	15,600	7,170
6	24,600	27,400	78,600	14,000	17,000	61,400	42,000	42,000	11,200	7,450	15,100	7,750
7	21,800	31,600	62,900	15,000	16,000	65,800	37,900	46,100	10,800	7,170	14,500	8,350
8	19,800	31,600	52,000	17,000	14,000	99,500	36,600	65,400	11,200	8,050	13,700	8,050
9	18,300	31,600	44,700	20,500	14,000	99,500	40,600	122,000	11,900	27,400	12,900	8,200
10	16,200	29,300	37,900	58,300	22,000	81,300	53,600	126,000	12,100	85,100	11,900	7,450
11	14,900	27,200	30,300	146,000	19,000	68,800	58,300	114,000	13,500	182,000	11,700	6,780
12	14,100	25,700	24,800	169,000	18,000	67,300	67,300	112,000	13,700	134,000	12,300	6,130
13	12,900	24,100	22,000	136,000	17,000	105,000	110,000	91,900	13,300	79,100	14,100	5,660
14	11,900	22,700	20,900	97,000	17,000	129,000	124,000	73,000	11,000	49,000	18,700	5,420
15	10,800	21,400	20,500	67,300	19,000	107,000	112,000	61,400	9,880	39,200	20,000	5,420
16	10,100	20,000	20,000	53,600	23,500	84,000	99,500	52,000	8,980	42,000	16,600	5,420
17	9,340	18,900	19,800	46,100	35,000	71,600	91,900	44,700	8,050	32,800	13,500	5,420
18	8,980	17,900	19,800	40,600	55,100	78,600	81,300	39,200	7,750	28,100	11,900	5,420
19	8,500	17,000	20,200	35,300	52,000	91,900	71,600	35,300	7,900	24,600	11,400	5,200
20	8,200	16,800	20,900	32,800	40,600	89,300	65,800	31,600	10,600	21,100	10,200	4,960
21	8,050	16,400	22,500	30,100	36,700	75,800	62,900	28,900	11,600	20,200	9,340	4,960
22	7,900	17,200	23,200	31,600	31,600	75,800	59,800	26,200	16,800	18,700	8,650	4,960
23	7,450	19,100	22,000	36,600	28,400	94,500	55,100	24,400	16,800	17,000	8,050	5,080
24	7,450	24,400	22,500	42,000	25,700	99,500	49,000	22,700	17,200	16,000	7,300	4,850
25	7,300	31,600	22,700	38,000	24,600	86,700	43,300	21,600	18,500	16,200	6,780	4,740
26	7,450	40,600	21,600	33,000	25,500	78,600	39,200	20,200	17,600	20,500	6,390	4,740
27	7,600	46,100	21,600	28,000	40,000	68,800	35,300	18,700	17,200	23,900	6,520	4,540
28	8,350	43,300	20,900	22,000	46,100	59,800	32,800	17,200	16,000	31,600	6,390	4,430
29	9,160	39,200	20,900	19,000		53,600	29,800	16,200	14,900	29,600	5,880	4,320
30	9,700	40,600	22,000	17,000		53,600	28,900	15,300	14,100	23,200	5,660	4,120
31	9,700		19,000	16,000		55,100		14,500		19,100	5,310	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	53,600	7,300	16,340	0.678	0.78
November	46,100	10,200	24,870	1.03	1.15
December	224,000	19,000	48,360	2.01	2.32
January	169,000	14,000	43,250	1.79	2.06
February	55,100	14,000	25,850	1.07	1.11
March	129,000	44,700	75,830	3.15	3.63
April	124,000	28,900	59,950	2.49	2.78
May	126,000	14,500	46,830	1.94	2.24
June	18,500	7,750	12,830	.532	.59
July	182,000	7,170	34,020	1.41	1.63
August	20,000	5,310	11,870	.493	.57
September	8,350	4,120	5,708	.237	.26
The year	224,000	4,120	33,960	1.41	19.12

Susquehanna River at Marietta, Pa.

Location.- Water-stage recorder, lat. 40°03'15", long. 76°31'50", 420 feet above mouth of Chickies Creek and 1 mile below Marietta, Lancaster County. Zero of gage is 200.00 feet above mean sea level.
Drainage area.- 25,990 square miles.
Records available.- October 1931 to September 1935.
Extremes.- Maximum discharge during year, 263,000 second-feet Dec. 2 (gage height, 48.27 feet); minimum, 2,970 second-feet Sept. 30 (gage height, 31.97 feet); minimum daily discharge, 4,630 second-feet Sept. 29.
1931-35: Maximum discharge, 296,000 second-feet (revised) Aug. 25, 1933 (gage height, 49.44 feet); minimum, 618 second-feet Sept. 26, 1932 (gage height, 30.89 feet) during shutdown at York Haven power plant in order to obtain low-water current meter measurements; minimum daily discharge, 1,380 second-feet Sept. 26, 1932.
Maximum stage known, 58.3 feet (revised) June 2, 1889 (discharge, about 700,000 second-feet).
Remarks.- Records excellent except those for low stages and those for periods of ice effect, Dec. 12-23, Jan. 1-9, Jan. 19 to Mar. 6, which are good. Discharge for periods of ice effect based on power-house records of Holtwood plant of Pennsylvania Water & Power Co. Flows below 8,000 second-feet regulated by York Haven Power Co. plant upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	63,300	11,400	112,000	17,000	16,000	47,000	60,300	29,000	14,300	14,600	18,000	5,500
2	57,300	11,600	247,000	16,500	18,000	47,500	68,000	31,900	14,000	13,700	17,300	5,600
3	48,700	11,400	200,000	16,000	19,000	52,500	61,800	35,100	13,100	11,100	17,300	6,230
4	41,000	12,900	152,000	15,500	18,000	60,500	54,300	38,600	12,500	9,740	18,000	6,580
5	32,900	19,900	117,000	15,000	20,000	65,500	50,100	38,600	11,900	9,490	16,600	8,570
6	29,900	29,000	90,200	14,500	19,000	63,500	46,100	43,500	11,900	8,750	16,000	9,740
7	26,300	32,900	72,900	15,000	17,000	72,900	42,200	48,700	11,600	8,240	15,300	9,240
8	23,100	34,000	58,800	17,000	15,000	99,500	41,000	63,300	11,600	8,280	15,000	9,240
9	20,800	34,000	48,700	21,000	15,000	105,000	52,900	112,000	12,800	18,000	14,000	9,330
10	18,700	30,900	41,000	49,800	22,000	90,200	63,300	134,000	13,100	47,500	12,800	9,010
11	17,300	29,000	34,000	130,000	20,000	76,200	68,000	117,000	13,700	180,000	13,100	8,130
12	16,300	26,300	26,500	175,000	19,000	74,500	72,900	117,000	14,600	148,000	12,800	7,280
13	15,000	24,600	24,000	147,000	18,000	97,800	107,000	101,000	14,000	93,200	13,700	6,630
14	14,000	23,900	22,500	111,000	19,000	136,000	130,000	83,000	12,800	60,300	16,000	6,320
15	12,800	22,300	21,500	79,500	21,000	119,000	119,000	69,600	11,100	43,500	21,600	5,890
16	11,400	21,600	21,000	60,300	26,000	95,700	107,000	58,800	10,500	44,800	18,700	5,800
17	11,100	20,100	21,000	51,500	40,000	81,300	99,500	50,100	9,490	38,600	16,000	6,010
18	10,500	18,700	21,000	42,200	59,000	79,500	90,200	43,500	8,750	30,900	13,400	6,140
19	10,300	18,000	21,500	35,000	58,500	93,800	79,500	37,400	8,770	26,300	12,200	6,330
20	9,650	17,300	22,500	33,000	56,000	97,600	71,200	34,000	10,100	23,900	11,900	5,710
21	9,380	17,300	24,000	31,000	45,500	86,500	68,000	29,900	11,600	20,800	10,600	5,270
22	9,460	17,300	25,000	31,000	38,000	83,000	64,900	27,100	14,700	20,800	10,000	5,450
23	9,010	19,400	24,000	36,000	33,500	95,700	60,300	24,600	18,000	18,000	9,090	5,370
24	8,940	23,900	24,600	42,000	29,500	105,000	54,300	23,100	18,000	17,000	8,370	5,320
25	8,580	43,500	25,400	39,000	27,000	93,800	48,700	22,300	18,700	16,600	7,570	5,240
26	8,780	39,800	24,600	34,000	31,000	86,500	42,200	20,800	18,700	18,700	7,090	5,230
27	9,070	48,700	22,000	28,000	36,500	77,800	37,400	19,400	18,700	23,100	6,700	5,160
28	9,750	46,100	20,800	23,000	48,500	68,000	34,000	18,000	18,000	28,200	7,360	5,160
29	9,870	41,000	22,300	20,000		61,800	31,900	16,600	16,600	31,900	6,710	4,630
30	10,800	44,800	21,600	18,000		58,800	29,900	16,000	15,300	25,400	6,240	4,730
31	10,800		20,100	16,500		58,800		15,000		21,600	5,860	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	63,300	8,580	19,190	0.738	0.85
November	48,700	11,400	26,390	1.02	1.14
December	247,000	20,100	52,560	2.02	2.33
January	175,000	14,500	44,530	1.71	1.97
February	59,000	15,000	28,750	1.11	1.16
March	136,000	47,000	81,650	3.14	3.62
April	130,000	29,900	65,200	2.51	2.80
May	134,000	15,000	49,000	1.88	2.17
June	18,700	8,750	13,630	.524	.58
July	180,000	8,240	34,870	1.34	1.54
August	21,600	5,860	12,750	.491	.565
September	9,740	4,630	6,495	.250	.28
The year	247,000	4,630	36,250	1.40	19.00

Chemung River at Corning, N. Y.

Location.- Chain gage, lat. 42°08'50", long. 77°03'40", at Bridge Street Bridge, at Corning, Steuben County. Zero of gage is 912.82 feet above mean sea level.
Drainage area.- 2,010 square miles.
Records available.- December 1909 to September 1935.
Extremes.- Maximum gage height during year, 20.1 feet July 8; minimum, 2.2 feet Oct. 15-21, 25, 26.
1909-35: Maximum gage height, that of July 8, 1935; minimum, 1.8 feet Sept. 2, 3, 1921.
Maximum stage known prior to construction of dikes, 20.0 feet June 1, 1889.
Remarks.- Records good. Gage heights obtained at this station for flood-warning purposes. Discharge is not determined.

Daily mean gage-height in feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.2	2.4	4.2	2.8	3.1	3.5	5.9	4.3	2.7	2.5	3.1	2.6
2	3.0	2.4	5.6	2.8	3.0	3.4	6.0	3.8	2.6	2.5	3.2	2.5
3	2.8	2.4	4.7	2.7	3.0	5.6	5.4	3.6	2.6	2.4	3.1	2.5
4	2.8	2.5	4.3	2.7	3.0	5.6	5.0	4.6	2.6	2.4	3.0	2.6
5	2.7	3.2	4.0	2.7	3.0	4.4	4.6	4.8	2.8	2.4	3.0	2.7
6	2.6	3.0	3.7	2.7	3.0	6.4	4.6	4.8	2.7	2.4	2.9	2.9
7	2.6	3.0	3.4	2.8	3.0	6.9	4.5	5.4	2.6	2.5	2.9	2.7
8	2.6	3.1	3.2	3.7	2.9	4.5	4.3	8.6	2.7	15.0	2.9	2.6
9	2.5	3.0	3.2	6.1	2.9	4.1	4.6	6.5	2.7	14.8	3.1	3.3
10	2.4	3.0	3.2	9.2	2.9	4.2	5.2	7.7	2.8	9.8	2.9	3.1
11	2.3	3.0	3.0	6.5	2.8	6.4	7.2	6.2	2.6	7.8	8.5	3.1
12	2.3	2.9	2.9	5.0	2.8	9.2	9.7	5.6	2.5	6.4	4.9	2.8
13	2.3	2.8	3.0	4.5	2.7	5.7	9.3	5.0	2.5	7.3	4.0	2.7
14	2.3	2.8	3.0	4.1	2.7	5.0	7.4	4.7	2.4	5.5	3.8	2.6
15	2.2	2.7	2.9	3.6	2.6	4.4	7.2	4.4	2.4	4.8	3.5	2.6
16	2.2	2.6	2.9	3.6	5.7	5.9	6.7	4.1	2.4	5.7	3.3	2.6
17	2.2	2.6	2.8	3.7	4.5		6.0	3.9	2.4	4.9	3.3	2.5
18	2.2	2.6	2.7	3.6	4.0	5.6	6.1	3.7	2.5	4.2	3.1	2.5
19	2.2	2.7	2.7	4.1	3.4	5.3	5.8	3.5	2.6	3.8	3.0	2.5
20	2.2	2.6	3.1	3.5	3.4	4.9	5.4	3.4	3.0	3.6	2.8	2.5
21	2.2	2.9	3.1	3.3	3.0	5.6	5.0	3.3	3.0	3.3	2.7	2.8
22	2.3	2.8	3.0	7.0	2.9	7.0	4.8	3.2	2.9	3.3	2.9	2.7
23	2.3	2.8	2.9	4.9	3.1	5.9	4.5	3.1	4.0	3.3	3.2	2.7
24	2.3	5.2	2.8	3.4	2.8	6.4	4.4	3.0	3.5	3.2	3.0	2.5
25	2.2	4.3	2.7	3.3	2.9	5.6	4.1	3.0	3.3	3.8	2.9	2.5
26	2.2	3.8	2.7	3.5	6.0	5.1	3.8	3.0	3.1	5.3	2.7	2.5
27	2.3	3.5	2.9	3.5	5.0	4.7	3.7	2.9	2.9	4.0	2.7	2.4
28	2.3	3.4	2.8	3.5	3.9	4.5	3.7	2.8	2.8	3.7	2.7	2.4
29	2.4	3.3	2.9	3.5		5.9	3.7	2.8	2.7	3.5	2.7	2.4
30	2.4	3.5	2.9	3.3		6.6	3.7	2.8	2.6	3.5	2.6	2.6
31	2.4		2.9	3.3		6.8		2.7		3.3	2.6	

Towanda Creek near Monroeton, Pa.

Location.- Chain gage, lat. 41°42'35", long. 76°29'00", at highway bridge 1½ miles above mouth of South Branch of Towanda Creek and 1½ miles southwest of Monroeton, Bradford County. Zero of gage is 774.14 feet above mean sea level.
Drainage area.- 214 square miles.
Records available.- October 1920 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; January 1914 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 17 years (1914-16, 1920-35), 286 second-feet.
Extremes.- Maximum discharge during year, 6,960 second-feet Dec. 1 (gage height, 7.5 feet, from graph based on gage readings); minimum, 7.7 second-feet Sept. 26, 27 (gage height, 1.21 feet).
1914-35: Maximum discharge, about 15,800 second-feet (revised) Nov. 16, 1926 (gage height, 11.0 feet, from graph based on gage readings); minimum, 0.7 second-foot Sept. 15, 17, 21, 22, 1932.
Remarks.- Records good except those estimated for periods of ice effect, Jan. 1-7, Jan. 25 to Feb. 24, which are fair. Some regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	265	54	4,140	55	65	162	295	340	55	32	17	9.6
2	185	54	2,040	50	66	124	318	275	46	29	44	10
3	145	51	892	45	72	570	275	295	43	26	35	11
4	127	112	670	43	70	459	238	470	49	23	38	14
5	108	303	480	42	65	286	220	390	52	22	31	20
6	102	339	378	45	57	798	248	390	46	20	29	17
7	102	373	308	60	50	755	227	912	38	28	40	14
8	85	265	243	196	47	403	224	802	47	75	74	11
9	72	218	162	1,030	46	298	275	560	231	348	57	13
10	62	188	156	1,330	40	298	435	820	179	365	39	16
11	57	165	132	670	35	844	1,480	530	116	224	60	14
12	51	156	129	421	33	1,380	2,060	440	86	131	72	12
13	46	134	127	350	33	386	1,340	390	67	155	46	11
14	43	127	115	339	35	440	1,140	340	52	106	55	10
15	39	108	89	252	55	390	1,290	275	40	76	42	12
16	38	102	87	195	250	530	995	234	35	65	37	11
17	36	106	87	169	160	1,040	780	213	34	50	61	10
18	33	108	112	178	115	665	700	196	60	40	33	10
19	33	124	148	124	95	530	780	155	104	33	24	8.6
20	31	132	283	120	80	470	905	133	116	33	20	11
21	31	120	154	159	68	1,240	740	123	91	33	17	14
22	29	108	132	515	56	825	560	109	95	26	17	14
23	32	182	112	288	54	630	440	104	128	24	15	12
24	31	897	106	142	54	630	365	95	106	26	14	11
25	31	515	100	120	60	500	318	84	100	31	12	10
26	46	384	97	100	972	390	244	72	74	27	11	8.6
27	62	318	108	86	378	318	230	67	58	21	10	7.7
28	68	298	117	76	214	318	216	60	55	17	11	9.1
29	60	590	102	72		440	192	58	46	16	9.6	11
30	59	1,040	95	68		365	415	72	39	15	8.2	11
31	56		64	66		340		61		15	10	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	265	29	69.8	0.326	0.38
November	1,040	51	256	1.20	1.34
December	4,140	64	386	1.80	2.08
January	1,330	42	239	1.12	1.29
February	972	33	119	.556	.58
March	1,380	124	543	2.54	2.93
April	2,060	192	598	2.79	3.11
May	912	58	292	1.36	1.57
June	231	34	76.3	.357	.40
July	365	15	68.8	.321	.37
August	74	8.2	31.9	.149	.17
September	20	7.7	11.8	.055	.06
The year	4,140	7.7	225	1.05	14.28

Tunkhannock Creek at Dixon, Pa.

Location.- Chain gage, lat. 41°33'30", long. 75°53'40", at highway bridge at Dixon, Wyoming County, 3 miles northeast of Tunkhannock. Zero of gage is 610.50 feet above mean sea level.
Drainage area.- 383 square miles.
Records available.- October 1918 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; January 1914 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 17 years (1918-35), 537 second-feet.
Extremes.- Maximum discharge during year, about 11,000 second-feet Dec. 1 (gage height, 9.7 feet, from graph based on gage readings); minimum, 46 second-feet Sept. 27 (gage height, 1.26 feet).
1914-35: Maximum discharge, about 19,100 second-feet (revised) Sept. 30, 1924 (gage height, 13.1 feet); minimum, 9.0 second-feet Aug. 12, 1930 (gage height, 0.73 foot).
Remarks.- Records fair except those estimated for periods of ice effect, Dec. 13, 14, Jan. 2-6, Jan. 25 to Feb. 24, Mar. 1, which are poor. Some regulation from storage in natural and artificial lakes and from operation of gristmills upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,910	198	5,450	194	140	609	895	970	139	113	133	73
2	970	292	4,760	185	140	512	970	680	110	84	205	69
3	785	230	2,480	170	150	785	785	645	118	76	145	75
4	645	536	1,800	157	145	895	680	970	118	69	113	120
5	545	1,280	1,310	152	130	895	610	820	150	75	113	392
6	785	970	1,050	175	115	1,910	785	895	153	76	86	198
7	820	970	895	551	108	2,130	578	2,620	133	219	106	136
8	545	750	645	1,130	105	1,220	512	2,940	230	165	126	93
9	450	750	420	2,380	105	785	820	1,800	565	3,900	95	86
10	392	610	420	2,720	90	820	1,310	2,980	292	2,680	86	113
11	340	545	365	1,800	83	1,910	1,800	1,700	194	1,320	97	113
12	315	480	292	1,050	80	3,650	1,800	1,310	156	820	128	82
13	292	450	290	750	87	1,700	1,600	1,050	126	645	116	75
14	250	450	280	750	110	1,220	1,400	970	101	450	250	69
15	250	392	270	512	300	970	1,220	750	101	365	150	64
16	230	392	270	512	1,000	1,130	1,310	610	76	480	150	57
17	223	450	270	450	200	2,020	1,220	512	80	315	150	62
18	208	420	230	450	150	1,500	1,220	420	80	250	101	54
19	191	392	278	340	120	1,220	1,310	365	184	208	86	51
20	188	480	738	392	105	1,130	1,050	340	191	208	76	57
21	162	392	392	860	103	2,020	895	292	159	122	76	78
22	216	365	340	2,280	105	1,910	785	270	223	162	86	101
23	216	422	315	970	118	1,400	715	270	270	148	130	78
24	205	1,450	292	512	180	1,500	610	250	205	250	93	65
25	188	970	270	420	645	1,130	545	216	212	270	53	51
26	208	750	292	350	2,910	970	420	188	178	292	62	54
27	230	680	292	280	1,140	750	392	178	148	188	67	47
28	230	645	270	240	698	820	420	148	250	133	67	51
29	226	645	270	200		1,500	365	150	165	145	61	71
30	198	750	250	170		1,130	1,190	165	120	133	54	69
31	178		175	150		970		156		120	59	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,910	162	406	1.06	1.22
November	1,450	198	604	1.58	1.76
December	5,450	175	828	2.16	2.49
January	2,720	150	686	1.79	2.06
February	2,910	80	334	.872	.91
March	3,650	512	1,326	3.46	3.99
April	1,800	365	940	2.45	2.73
May	2,940	148	827	2.16	2.49
June	365	76	168	.439	.49
July	3,900	69	467	1.22	1.41
August	250	53	107	.279	.32
September	392	47	90.1	.235	.26
The year	5,450	47	568	1.48	20.13

Wapwallopen Creek near Wapwallopen, Pa.

Location.- Water-stage recorder, lat. 41°03'35", long 76°05'25", at Harts Bridge, 2¼ miles southeast of Wapwallopen, Luzerne County, and 3½ miles upstream from mouth of creek. Zero of gage is 752.41 feet above mean sea level.
Drainage area.- 45.8 square miles.
Records available.- October 1919 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; October 1919 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 15 years (1920-35), 61.0 second-feet.
Extremes.- Maximum discharge during year, 1,740 second-feet July 9 (gage height, 7.05 feet); minimum, 5.8 second-feet Sept. 28 (gage height, 0.95 foot).
1919-35: Maximum discharge, about 2,260 second-feet (revised) Sept. 30, 1924 (gage height, 7.9 feet, from graph based on gage readings); minimum, 3 second-feet Sept. 27, 28, Oct. 30, 31, 1922 (gage height, 0.76 foot).
Remarks.- Records fair except those estimated for periods of ice effect, Dec. 9-18, Dec. 31 to Jan. 8, Jan. 24 to Feb. 25, and for period of recorder failure, May 28 to June 18, which are poor. Some regulation at low stages from operation of gristmills upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	108	32	667	42	36	92	81	91	30	29	79	10
2	83	41	443	38	38	85	76	74	27	24	97	11
3	69	28	276	36	41	86	69	73	23	22	71	14
4	57	130	224	34	37	92	62	81	25	20	57	32
5	50	126	171	33	35	84	60	72	28	21	43	43
6	68	110	141	36	33	118	64	79	26	18	35	21
7	64	94	120	45	32	135	56	150	22	19	41	16
8	45	78	103	70	31	104	69	126	26	49	40	13
9	38	69	90	100	30	93	134	103	110	1,020	31	12
10	33	62	80	113	28	88	155	121	90	966	27	12
11	31	57	72	89	26	108	162	103	66	462	27	11
12	30	53	64	75	24	180	178	88	50	209	26	10
13	28	51	58	90	24	141	182	81	41	162	21	10
14	26	47	54	78	26	122	169	93	34	118	20	10
15	26	42	50	143	45	117	155	80	29	94	18	8.4
16	25	41	49	103	120	140	157	68	26	99	18	10
17	21	39	47	128	130	157	142	62	25	74	18	8.0
18	22	38	48	100	110	122	128	57	50	61	16	7.5
19	21	35	78	58	70	111	110	52	32	59	16	8.0
20	19	32	101	76	51	110	99	48	33	154	16	12
21	19	30	62	71	45	155	92	46	27	85	16	9.8
22	21	30	53	90	40	130	84	43	198	63	16	9.3
23	20	58	48	75	37	118	79	41	86	72	16	9.0
24	19	141	43	60	38	121	72	39	66	132	14	7.5
25	18	81	40	54	45	103	64	36	57	101	12	7.0
26	27	68	59	49	149	93	59	34	45	105	12	6.1
27	35	64	111	45	103	84	55	32	39	73	12	6.8
28	31	63	94	42	92	96	53	30	41	60	12	7.0
29	27	70	89	40		116	54	29	38	51	12	13
30	22	108	65	38		87	145	36	36	45	11	11
31	21		50	36		82		33		40	11	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	108	18	36.3	0.793	0.91
November	141	28	63.9	1.40	1.56
December	667	40	118	2.58	2.97
January	143	33	67.3	1.47	1.70
February	149	24	54.1	1.18	1.23
March	180	82	112	2.45	2.82
April	182	53	102	2.23	2.49
May	150	29	67.8	1.48	1.71
June	198	22	47.5	1.04	1.16
July	1,020	18	145	3.17	3.66
August	97	11	27.8	.607	.70
September	43	6.1	12.2	.266	.30
The year	1,020	6.1	71.5	1.56	21.21

West Branch of Susquehanna River at Bower, Pa.

Location.- Water-stage recorder, lat. 40°53'50", long. 78°40'40", at highway bridge at Bower, Clearfield County, 4.8 miles downstream from Mahaffey and mouth of Chest Creek. Zero of gage is 1,206.39 feet (revised) above mean sea level.
Drainage area.- 315 square miles.
Records available.- October 1918 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; October 1913 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 22 years, 557 second-feet.
Extremes.- Maximum discharge during year, 7,120 second-feet July 25 (gage height, 11.65 feet); minimum, 37 second-feet Sept. 26 (gage height, 3.92 feet); minimum daily discharge, 41 second-feet Sept. 26, 27.
1913-35: Maximum discharge, about 10,400 second-feet (revised) Sept. 5, 1926; maximum gage height, 14.6 feet Mar. 12, 1920 (affected by ice); minimum discharge, 16 second-feet Sept. 29, Oct. 1, 6, 13, 1930 (gage height, 3.66 feet). Maximum stage known, 20.0 feet June 1889 (discharge, about 32,600 second-feet).
Remarks.- Records good except those estimated for periods of ice effect, Jan. 1-8, Jan. 25 to Feb. 15, and for period of recorder failure, Feb. 28 to Mar. 2, which are poor. Some regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,230	252	992	450	230	1,100	396	270	132	74	413	70
2	755	290	1,170	400	230	1,000	372	747	120	67	576	65
3	540	237	920	370	220	2,480	329	1,630	115	61	1,040	72
4	408	451	840	350	200	2,400	296	1,310	144	57	980	147
5	322	676	687	340	180	1,950	277	1,030	134	58	570	370
6	286	698	555	340	160	2,860	296	1,190	111	57	392	152
7	280	704	488	380	150	2,650	280	3,680	102	118	805	109
8	220	605	424	450	150	1,920	280	3,000	99	1,140	600	86
9	186	483	368	1,500	140	1,470	336	1,840	126	2,060	470	76
10	160	408	272	2,020	140	1,110	633	3,290	124	895	404	86
11	144	420	261	1,510	130	2,350	1,060	2,250	100	450	527	77
12	136	384	273	1,140	130	3,890	939	1,510	89	280	388	65
13	124	352	273	888	120	2,750	1,060	1,240	83	273	280	60
14	113	336	267	1,140	120	1,800	958	1,100	76	185	294	63
15	106	293	246	834	450	1,310	828	870	71	142	252	61
16	106	270	240	687	1,070	1,310	798	660	74	128	760	58
17	99	308	300	704	676	1,170	665	560	68	107	360	52
18	96	525	273	816	515	926	600	470	215	94	255	49
19	94	540	234	590	442	864	501	404	252	83	202	49
20	89	610	423	560	384	1,030	438	356	168	72	172	77
21	88	496	368	1,260	301	1,180	392	318	124	104	153	77
22	89	442	318	2,850	266	1,100	360	283	250	347	206	58
23	91	882	293	1,840	209	1,100	322	255	280	226	155	51
24	84	1,800	293	1,090	405	1,060	290	237	191	409	120	44
25	82	1,200	290	800	460	870	258	215	207	4,240	104	43
26	195	920	627	650	1,710	744	234	194	149	1,790	92	41
27	261	726	929	450	1,430	643	218	176	118	859	92	41
28	396	590	665	360	1,200	605	220	162	104	860	92	42
29	293	638	826	310		626	215	155	94	1,210	82	49
30	255	714	813	270		496	261	172	83	607	77	45
31	218		535	250		438		153		488	74	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,230	82	243	0.771	0.89
November	1,800	237	575	1.83	2.04
December	1,170	234	499	1.58	1.82
January	2,850	250	826	2.62	3.02
February	1,710	120	422	1.34	1.40
March	3,890	438	1,458	4.63	5.34
April	1,060	215	470	1.49	1.66
May	3,680	153	959	3.04	3.50
June	280	68	133	.422	.47
July	4,240	57	566	1.80	2.08
August	1,040	74	354	1.12	1.29
September	370	41	77.8	.247	.28
The year	4,240	41	552	1.75	23.79

West Branch of Susquehanna River at Renovo, Pa.

Location.- Water-stage recorder, lat. 41°18'50", long.77°44'45", at highway bridge at Renovo, Clinton County. Zero of gage is 634.03 feet above mean sea level.
Drainage area.- 2,975 square miles.
Records available.- October 1919 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; July 1895 to December 1903, October 1905 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 23 years (1908-15, 1919-35), 4,709 second-feet.
Extremes.- Maximum discharge during year, 33,600 second-feet May 8 (gage height, 9.13 feet); minimum, 338 second-feet Sept. 28 (gage height, -0.38 foot).
1895-1903, 1905-35: Maximum discharge, about 84,300 second-feet (revised) Apr. 30, 1909; maximum gage height, 25.0 feet Feb. 28, 1910 (affected by ice); minimum discharge, 80 second-feet Dec. 6, 1908 (gage height, -1.10 feet).
Maximum stage known, 27.3 feet (revised) June 1, 1889 (discharge, about 211,000 second-feet).
Remarks.- Records good except those estimated for period of ice effect, Jan. 30 to Feb. 16, which are poor.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,730	1,270	7,020	2,910	2,300	6,880	6,400	2,640	1,580	1,500	2,560	581
2	4,520	1,320	12,500	2,910	2,200	5,870	5,870	2,640	1,440	1,300	2,230	540
3	2,910	1,420	11,900	3,390	2,300	7,920	5,100	3,350	1,300	1,140	2,000	532
4	2,230	1,580	9,500	3,290	2,200	13,400	4,620	7,820	1,300	1,140	2,700	557
5	1,790	3,720	7,920	3,870	2,000	11,100	4,160	8,210	1,640	1,540	2,910	1,380
6	1,540	4,740	6,530	4,820	1,900	12,700	3,930	8,330	1,450	1,190	2,150	1,790
7	1,350	4,500	5,610	15,900	1,800	21,100	3,600	16,400	1,300	1,060	1,790	1,580
8	1,240	4,270	4,740	10,100	1,700	18,600	3,500	31,300	1,210	2,430	1,980	1,110
9	1,150	3,930	4,160	9,100	1,600	13,700	3,710	22,100	1,270	10,600	2,910	863
10	989	3,390	3,290	24,600	1,600	10,700	4,160	24,600	1,240	9,800	2,390	773
11	843	3,000	2,820	21,000	1,550	11,200	6,080	25,800	1,110	6,740	2,560	744
12	734	2,910	2,230	14,800	1,500	21,400	8,710	18,500	1,070	4,450	3,190	651
13	669	2,730	2,520	10,700	1,450	23,500	9,900	13,500	968	3,710	2,560	581
14	606	2,640	3,000	8,710	1,400	16,500	9,900	10,700	853	2,910	2,080	540
15	565	2,390	2,730	7,630	1,400	12,300	8,800	8,780	763	2,310	1,860	509
16	540	2,150	2,640	6,530	4,000	10,700	8,310	7,350	696	2,230	2,210	480
17	517	2,000	2,470	5,610	5,820	13,100	7,630	6,000	669	1,790	2,080	450
18	494	2,000	2,310	5,100	4,280	12,700	6,660	5,230	861	1,490	2,150	417
19	480	2,310	2,080	4,740	3,500	10,700	6,000	4,500	2,920	1,260	1,660	397
20	465	3,110	2,230	4,040	3,100	9,100	5,360	3,930	3,820	1,130	1,360	465
21	443	3,500	2,390	4,450	2,560	11,200	4,740	3,500	3,190	1,120	1,210	798
22	443	3,290	2,390	10,000	2,390	14,300	4,380	3,190	3,620	1,150	1,120	706
23	443	3,500	2,150	12,900	2,150	13,100	3,930	3,000	5,480	1,210	1,350	581
24	443	7,180	2,000	9,100	1,930	13,100	3,600	2,730	4,980	3,520	1,180	502
25	437	9,700	1,930	6,580	2,440	11,500	3,290	2,470	4,380	5,700	968	430
26	457	7,920	1,860	5,610	5,490	9,500	3,000	2,310	3,500	11,900	802	378
27	564	6,400	2,150	4,740	9,900	7,920	2,730	2,080	2,910	7,400	715	355
28	936	5,360	3,240	3,880	7,930	7,350	2,640	1,930	2,470	4,750	696	343
29	1,490	4,860	3,290	3,600		8,210	2,560	1,860	2,000	3,710	754	355
30	1,630	5,360	4,040	3,000		7,920	2,640	1,860	1,720	4,760	734	397
31	1,390		3,830	2,600		7,070		1,720		3,190	651	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	7,730	437	1,292	0.434	0.50
November	9,700	1,270	3,748	1.26	1.41
December	12,500	1,860	4,112	1.38	1.59
January	24,600	2,600	7,620	2.56	2.95
February	9,900	1,400	2,942	.989	1.03
March	23,500	5,870	12,080	4.06	4.68
April	9,900	2,560	5,197	1.75	1.95
May	31,300	1,720	8,333	2.80	3.23
June	5,480	669	2,057	.691	.77
July	11,900	1,060	3,488	1.17	1.35
August	3,190	651	1,791	.602	.69
September	1,790	343	660	.222	.25
The year	31,300	343	4,472	1.50	20.40

West Branch of Susquehanna River at Lock Haven, Pa.

Location.- Chain gage, lat. 41°08'20", long. 77°26'30", at Jay Street Bridge, at Lock Haven, Clinton County, Zero of gage is 535.00 feet above mean sea level.
Drainage area.- 3,338 square miles.
Records available.- October 1913 to August 1923, August 1925 to September 1935.
Extremes.- Maximum gage height during year, 15.0 feet, from graph based on gage readings Jan. 10; minimum, 1.08 feet Sept. 29.
1913-23, 1925-35: Maximum gage height, 26.8 feet (caused by ice) Feb. 21, 1918; minimum, 0.60 foot Sept. 25, 1932.
Maximum stage known, 29.8 feet May 31, 1889.
Remarks.- Records good. Gage heights obtained at this station for flood-warning purposes. Discharge is not determined.

Daily mean gage-height in feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.98	2.15	5.72	3.74	5.60	6.49	5.31	3.63	2.89	2.81	3.46	1.71
2	4.13	2.12	8.32	3.91	5.16	6.37	5.09	3.60	2.72	2.62	3.22	1.70
3	3.38	2.18	8.29	4.14	5.44	6.65	4.85	3.82	2.62	2.41	3.10	1.68
4	2.93	2.67	7.35	4.35	5.25	8.44	4.66	5.22	2.59	2.35	2.97	1.74
5	2.61	3.11	6.56	4.28	4.85	7.17	4.52	6.16	2.61	2.45	3.54	1.94
6	2.37	4.27	5.96	3.44	4.51	7.15	4.42	6.26	2.78	2.59	3.28	3.06
7	2.19	4.29	5.51	3.18	4.15	8.87	4.22	7.04	2.59	2.43	2.95	2.72
8	2.08	4.19	4.98	3.78	3.70	8.53	4.12	11.12	2.52	2.37	2.89	2.42
9	2.02	4.09	4.64	4.61	3.80	7.53	4.26	9.54	2.56	6.73	3.25	2.15
10	1.95	3.95	4.16	11.70	4.57	6.65	4.69	9.34	2.51	7.08	3.50	1.98
11	1.83	3.69	3.45	9.56	4.45	6.53	5.24	10.30	2.41	5.73	3.60	1.89
12	1.73	3.57	3.48	8.16	4.39	8.37	6.30	8.72	2.31	4.81	3.64	1.81
13	1.63	3.55	3.48	7.08	4.25	9.55	6.84	7.66	2.25	4.05	3.67	1.70
14	1.53	3.49	4.00	6.51	4.11	8.20	6.84	6.94	2.12	3.75	3.42	1.63
15	1.48	3.39	3.94	6.01	4.33	7.10	6.82	6.36	2.06	3.39	3.01	1.59
16	1.43	3.31	3.48	5.64	4.69	6.65	6.36	5.86	1.92	3.21	3.06	1.54
17	1.43	3.13	3.58	5.31	6.83	7.10	6.08	5.36	1.90	3.03	3.08	1.47
18	1.39	3.04	3.64	5.08	6.24	7.20	5.72	5.02	1.99	2.75	3.07	1.41
19	1.36	3.17	3.34	4.98	5.30	6.70	5.42	4.72	2.48	2.51	2.87	1.40
20	1.31	3.54	3.24	4.68	5.17	6.35	5.19	4.49	4.27	2.35	2.62	1.54
21	1.30	3.99	3.58	4.54	4.77	6.55	4.92	4.19	3.95	2.29	2.40	1.58
22	1.33	4.05	3.51	6.21	4.45	7.53	4.70	4.02	3.81	2.30	2.27	1.92
23	1.30	4.15	3.84	7.91	4.41	7.37	4.46	3.86	4.79	2.34	2.26	1.72
24	1.31	5.08	3.48	6.90	4.13	7.17	4.26	3.70	4.73	2.99	2.44	1.57
25	1.35	7.02	3.24	5.90	3.87	6.85	4.10	3.52	4.49	4.78	2.18	1.43
26	1.37	6.37	3.18	5.24	4.45	6.37	3.92	3.38	4.23	6.71	2.00	1.24
27	1.35	5.65	3.31	7.36	7.95	5.93	3.76	3.25	3.77	6.55	1.94	1.13
28	1.65	5.22	3.47	6.51	7.67	5.69	3.63	3.15	3.51	4.73	1.90	1.11
29	1.93	4.99	3.74	6.33		5.83	3.53	3.08	3.25	4.17	1.82	1.09
30	2.36	5.17	4.18	6.11		5.73	3.51	3.04	3.19	3.87	1.86	1.11
31	2.30		3.86	5.86		5.53		2.96		3.98	1.83	

West Branch of Susquehanna River at Williamsport, Pa.

Location.- Water-stage recorder, lat 41°14'15", long. 76°59'55", at highway bridge at Williamsport, Lycoming County. Zero of gage is 494.55 feet above mean sea level.
Drainage area.- 5,682 square miles.
Records available.- March 1895 to December 1913, October 1918 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; March 1895 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 40 years, 8,852 second-feet.
Extremes.- Maximum discharge during year, 53,900 second-feet Jan. 10 (gage height, 12.20 feet); minimum, 662 second-feet Sept. 30 (gage height, 0.35 foot).
1895-1935: Maximum discharge, about 147,000 second-feet Mar. 5, 1923; maximum gage height, 21.7 feet Mar. 1, 1902 (affected by ice); minimum discharge, 231 second-feet Sept. 12, 13, 1932 (gage height, -Q.42 foot); minimum daily discharge, 250 second-feet June 30, July 10, 1912.
Maximum stage known, 32.4 feet June 1, 1889 (discharge, about 252,000 second-feet).
Remarks.- Records fair. Discharge estimated for period of ice effect, Jan. 27 to Feb. 16. Slight regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10,700	2,280	25,700	4,660	3,900	11,500	14,000	6,380	3,300	2,970	4,260	1,050
2	12,000	2,070	36,900	4,260	3,700	10,800	12,800	5,930	2,970	2,560	3,520	1,030
3	8,300	2,070	31,800	4,390	3,700	13,200	11,500	5,930	2,760	2,260	3,300	1,010
4	6,230	2,700	24,900	5,350	4,000	19,000	10,000	8,410	2,860	2,040	3,190	1,080
5	4,930	5,650	19,900	4,660	4,300	21,700	9,160	14,000	2,760	1,970	3,520	1,330
6	4,130	8,300	16,200	3,640	3,600	20,400	8,640	14,900	2,970	2,390	3,760	1,590
7	3,640	9,500	13,600	3,640	3,000	32,900	7,970	19,000	2,760	2,110	3,190	2,460
8	3,190	8,640	11,200	4,800	2,600	33,200	7,640	42,200	2,560	2,240	2,970	2,180
9	2,760	7,970	9,330	9,740	2,400	27,000	8,300	43,500	2,970	7,270	3,190	1,730
10	2,520	7,320	7,160	40,600	2,300	21,400	9,680	37,400	3,410	16,700	4,130	1,400
11	2,280	6,380	5,930	44,100	2,200	19,500	13,600	43,500	2,970	13,500	4,660	1,210
12	1,950	5,930	4,340	31,800	2,200	29,200	21,400	36,900	2,520	9,600	6,080	1,180
13	1,800	5,490	4,390	23,400	2,100	39,200	26,400	28,000	2,290	7,000	5,350	1,090
14	1,640	5,210	4,800	19,000	2,100	32,400	25,900	22,900	2,140	6,380	4,260	1,010
15	1,530	4,800	5,070	15,300	3,000	24,900	24,400	19,000	1,950	5,070	3,520	959
16	1,440	4,260	4,800	13,600	6,500	21,900	23,400	15,300	1,800	4,660	3,190	893
17	1,400	4,000	4,800	11,500	8,690	24,900	20,400	12,800	1,750	4,260	3,300	850
18	1,330	3,760	4,520	10,200	10,900	27,000	18,100	10,800	1,830	3,300	2,970	840
19	1,260	3,760	4,000	8,300	7,640	23,900	15,800	9,330	2,330	2,660	2,970	830
20	1,210	4,130	4,390	7,320	6,380	20,900	14,000	8,470	5,880	2,330	2,450	926
21	1,180	5,210	4,930	7,320	5,930	21,900	12,300	7,480	7,160	2,280	2,070	982
22	1,220	5,640	4,660	11,200	4,260	28,500	11,200	6,690	6,080	2,070	1,810	1,010
23	1,130	6,080	4,520	19,900	3,640	27,500	9,680	6,230	7,000	2,070	1,620	1,180
24	1,160	11,200	4,130	15,800	3,670	25,900	8,980	5,780	8,300	2,760	1,720	1,070
25	1,140	17,100	3,760	10,500	3,080	23,900	7,970	5,350	7,800	5,680	1,690	948
26	1,210	16,700	3,490	7,480	4,920	20,900	7,000	4,800	6,840	9,590	1,450	871
27	1,290	13,600	3,950	6,650	11,200	17,600	6,230	4,390	5,640	13,800	1,290	800
28	1,590	11,900	3,240	5,400	14,900	15,800	5,780	4,000	4,800	8,730	1,140	751
29	1,830	11,900	4,130	5,000		16,700	5,490	3,760	4,000	5,930	1,070	751
30	2,180	15,300	5,210	4,600		16,200	5,930	3,760	3,410	4,930	1,080	679
31	2,500		4,930	4,200		15,300		3,640		5,780	1,130	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	12,000	1,130	2,925	0.515	0.59
November	17,100	2,070	7,295	1.28	1.43
December	36,900	3,240	9,377	1.65	1.90
January	44,100	3,640	11,880	2.09	2.41
February	14,900	2,100	4,886	.960	.90
March	39,200	10,800	22,740	4.00	4.61
April	26,400	5,490	12,790	2.25	2.51
May	43,500	3,640	14,860	2.62	3.02
June	8,300	1,750	3,860	.679	.76
July	16,700	1,970	5,319	.936	1.08
August	6,080	1,070	2,898	.510	.59
September	2,460	679	1,123	.198	.22
The year	44,100	679	8,380	1.47	20.02

Clearfield Creek at Dimeling, Pa.

Location.- Water-stage recorder, lat. 40°58'15", long. 78°24'25", at highway bridge at Dimeling, Clearfield County, 400 feet below mouth of Little Clearfield Creek. Zero of gage is 1,145.56 feet above mean sea level.
Drainage area.- 371 square miles.
Records available.- October 1918 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; October 1913 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 22 years, 571 second-feet.
Extremes.- Maximum discharge during year, 4,290 second-feet May 7; maximum gage height, 11.61 feet Jan. 1 (affected by ice); minimum discharge, 36 second-feet Sept. 18, 27, 28 (gage height, 3.55 feet).
1913-35: Maximum discharge, 11,700 second-feet Mar. 13, 1920; maximum gage height, 18.5 feet Mar. 11, 1920 (affected by ice); minimum discharge, 6 second-feet Oct. 1, 9, 1926 (gage height, 3.15 feet); minimum daily discharge, 7.1 second-feet Oct. 1, 1925.
Remarks.- Records good except those estimated for periods of ice effect, Dec. 11 to Jan. 10, Jan. 29 to Mar. 2, and for period of missing gage-height record, May 10-22, which are poor. Some regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,320	184	1,080	400	260	1,100	464	310	144	75	274	56
2	765	212	1,720	380	250	1,100	432	459	124	67	321	54
3	538	197	1,200	360	240	2,420	398	1,470	114	63	618	57
4	410	303	1,060	350	220	2,100	357	1,270	116	62	483	101
5	332	668	860	340	200	1,770	329	990	118	58	353	243
6	288	606	704	340	180	2,480	345	1,100	112	56	259	152
7	284	601	590	380	170	2,680	365	3,490	99	307	418	95
8	240	543	512	800	160	2,080	329	3,260	92	397	483	71
9	195	437	442	1,600	150	1,430	369	2,040	116	575	381	60
10	166	372	306	2,100	145	1,200	566	3,200	157	691	341	59
11	146	376	260	1,770	140	1,680	1,200	2,500	121	332	648	58
12	133	356	260	1,270	135	3,200	1,200	2,000	93	207	525	53
13	120	325	270	990	130	2,630	1,310	1,600	81	168	337	51
14	110	321	250	1,020	125	1,820	1,160	1,300	77	134	394	48
15	104	294	240	860	250	1,390	990	1,100	70	106	350	46
16	101	263	240	674	1,000	1,390	925	900	67	97	281	44
17	98	263	280	668	800	1,310	765	700	65	80	226	42
18	92	298	250	674	700	1,060	704	600	154	72	180	41
19	91	332	230	488	500	925	601	500	229	56	149	40
20	88	368	370	474	400	1,100	517	440	271	58	128	65
21	84	336	330	926	350	1,270	455	390	180	58	126	64
22	82	309	300	2,330	300	1,270	411	340	232	116	151	66
23	83	503	290	1,680	250	1,160	377	299	281	126	116	53
24	82	1,430	280	951	400	1,160	345	281	243	598	89	44
25	82	1,020	280	674	450	925	314	249	182	1,180	81	39
26	98	796	400	674	1,600	828	285	223	152	1,200	75	38
27	153	651	850	495	1,500	704	253	200	116	617	72	37
28	298	568	650	415	1,300	646	239	182	99	431	76	38
29	280	617	800	402		765	243	171	90	874	65	40
30	215	860	800	350		601	277	168	83	481	53	39
31	186		450	290		512		168		337	57	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,320	82	234	0.631	0.73
November	1,430	184	480	1.29	1.44
December	1,720	230	534	1.44	1.66
January	2,330	290	810	2.18	2.51
February	1,600	125	439	1.18	1.23
March	3,200	512	1,442	3.89	4.48
April	1,310	239	551	1.49	1.66
May	3,490	168	1,029	2.77	3.19
June	281	65	136	.367	.41
July	1,200	56	312	.841	.97
August	648	53	262	.706	.81
September	243	37	63.1	.170	.19
The year	3,490	37	528	1.42	19.28

Driftwood Branch of Sinnemahoning Creek at Sterling Run, Pa.

Location.- Staff gage, lat. 41°24'30", long. 78°11'25", 800 feet above highway bridge at Sterling Run, Cameron County, and 1,100 feet above mouth of Sterling Run. Zero of gage is 894.60 feet above mean sea level.
Drainage area.- 281 square miles.
Records available.- November 1918 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; September 1913 to September 1935 in reports of Pennsylvania Department of Forests and Waters. Records prior to October 1932 obtained at a site 800 feet downstream.
Average discharge.- 16 years (1919-35), 435 second-feet.
Extremes.- Maximum discharge during year, 5,460 second-feet May 8 (gage height, 5.8 feet, from graph based on gage readings); minimum, 18 second-feet Oct. 20, 21 (gage height, 1.54 feet).
1913-35: Maximum discharge, about 12,700 second-feet Feb. 12, 1925; maximum gage height, 10.4 feet (from graph based on gage readings affected by ice) Mar. 5, 1920, at former site; minimum discharge, 0.4 second-foot Sept. 7, 12-14, 1930.
Remarks.- Records poor. Discharge estimated for periods of ice effect, Dec. 12-19, Jan. 1-8, Jan. 28 to Feb. 24. Slight regulation from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	150	136	686	150	148	606	643	204	84	127	166	38
2	94	154	1,040	140	150	361	572	200	74	72	155	36
3	75	126	803	135	165	643	444	272	70	70	134	33
4	58	322	680	135	145	680	388	700	166	77	114	192
5	49	444	537	140	135	572	336	940	117	77	90	510
6	45	388	415	170	125	1,080	336	990	90	70	84	205
7	52	336	361	160	120	2,380	277	3,110	80	127	96	148
8	43	310	301	300	115	1,400	282	4,480	99	1,410	114	105
9	35	268	250	1,930	110	893	310	2,300	82	1,860	120	99
10	30	237	176	4,480	105	760	361	3,160	67	1,030	96	114
11	27	259	165	2,760	100	1,610	537	2,380	58	612	148	77
12	24	229	155	1,340	100	3,160	680	1,340	50	425	99	64
13	21	220	150	846	95	2,040	760	940	50	346	84	54
14	20	208	145	720	100	1,130	720	723	42	261	80	50
15	20	180	140	537	160	803	680	545	39	201	82	48
16	21	165	145	415	250	913	606	454	36	181	90	50
17	20	180	150	361	210	1,850	505	371	33	141	74	40
18	20	229	180	310	170	1,540	444	312	154	117	60	38
19	20	361	250	224	150	1,100	388	274	371	96	52	34
20	18	505	291	263	135	846	361	239	279	82	46	144
21	19	444	212	454	120	1,750	310	222	261	90	44	84
22	22	388	147	1,100	115	2,200	296	197	694	84	144	64
23	27	592	150	803	110	1,690	259	189	847	105	77	46
24	28	1,210	158	444	170	1,400	242	178	533	954	60	39
25	27	940	136	301	683	1,150	212	166	483	804	39	39
26	51	720	215	272	2,260	893	192	144	346	648	36	34
27	86	473	233	180	846	680	176	124	279	398	36	33
28	129	415	196	160	720	760	196	117	234	346	93	46
29	123	415	272	150		893	196	114	185	346	58	62
30	116	361	220	145		893	220	111	148	234	39	46
31	112		173	145		720		99		210	39	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	150	18	51.0	0.181	0.21
November	1,210	126	374	1.33	1.48
December	1,040	136	295	1.05	1.21
January	4,480	135	635	2.26	2.61
February	2,260	95	279	.993	1.03
March	3,160	361	1,206	4.29	4.95
April	760	176	398	1.42	1.58
May	4,480	99	826	2.94	3.39
June	847	33	202	.719	.80
July	1,860	70	374	1.33	1.53
August	166	36	85.5	.304	.35
September	510	33	85.7	.305	.34
The year	4,480	18	403	1.43	19.48

North Bald Eagle Creek at Beech Creek Station, Pa.

Location.- Water-stage recorder, lat. 41°03'55", long. 77°34'00", at highway bridge just below mouth of Beech Creek, at Beech Creek Station, Clinton County. Zero of gage is 571.79 feet above mean sea level.
Drainage area.- 559 square miles.
Records available.- October 1918 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; June 1910 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 25 years, 791 second-feet.
Extremes.- Maximum discharge during year, 5,350 second-feet Jan. 10 (gage height, 6.00 feet); minimum, 123 second-feet Sept. 30 (gage height, 1.47 feet).
1910-35: Maximum discharge, about 17,900 second-feet (revised) June 17, 1916 (gage height, 12.5 feet); minimum, 15 second-feet Jan. 9, 1931 (gage height, 1.12 feet); minimum daily discharge (estimated), 25 second-feet Jan. 22, 23, 1931.
Remarks.- Records fair except those estimated for period of recorder failure, Nov. 13, 14, and for periods of ice effect, Dec. 11-16, Jan. 1-9, Jan. 25 to Feb. 22, which are poor. Some regulation at low stages from operation of gristmills upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,150	250	3,710	380	300	840	855	549	324	213	213	148
2	725	248	3,820	360	350	1,450	802	562	305	209	202	150
3	570	224	2,550	420	330	2,620	725	784	296	198	205	162
4	481	656	1,960	380	310	1,980	661	828	300	202	216	191
5	418	932	1,540	360	290	1,600	622	793	300	228	198	272
6	395	819	1,200	340	270	2,160	630	1,110	282	202	182	213
7	377	717	1,060	500	250	2,960	592	2,890	269	205	188	172
8	335	638	910	470	230	2,480	608	2,820	269	264	294	162
9	300	563	793	2,800	220	1,840	851	2,160	395	718	411	156
10	269	500	693	3,940	220	1,600	1,360	3,360	329	578	293	159
11	252	500	600	2,820	210	1,720	1,900	2,750	277	418	556	156
12	248	462	550	2,030	200	3,020	1,960	2,160	260	324	382	150
13	248	440	500	1,540	190	2,550	2,160	1,780	252	305	282	148
14	231	410	460	1,310	190	2,030	1,960	1,540	248	264	256	148
15	234	372	430	1,060	1,000	1,720	1,780	1,260	228	260	248	142
16	224	350	430	900	1,300	1,720	1,660	1,000	228	561	224	139
17	214	340	455	837	1,100	1,960	1,360	882	224	350	209	139
18	218	329	406	734	850	1,660	1,180	776	269	286	178	136
19	212	335	404	608	650	1,480	1,040	693	372	260	185	145
20	201	326	615	600	540	1,480	928	630	436	248	182	188
21	205	310	474	693	450	1,930	855	592	319	235	178	188
22	224	310	436	1,020	420	1,840	793	549	372	280	178	148
23	209	890	412	819	383	1,960	717	514	350	291	178	139
24	201	1,660	412	564	444	2,030	653	481	305	286	168	139
25	203	1,160	406	520	556	1,780	600	449	286	414	162	133
26	235	928	482	470	1,380	1,540	556	418	264	377	156	131
27	250	819	530	420	1,270	1,310	528	395	243	286	159	131
28	329	759	579	380	811	1,200	521	372	231	248	156	133
29	291	1,210	570	360		1,200	507	366	228	256	159	139
30	258	1,780	570	330		995	592	361	220	243	156	131
31	234		402	310		910		340		216	153	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,150	201	321	0.574	0.66
November	1,780	224	641	1.15	1.28
December	3,820	402	915	1.64	1.89
January	3,940	310	912	1.63	1.88
February	1,380	190	526	.941	.98
March	3,020	840	1,792	3.21	3.70
April	2,160	507	999	1.79	2.00
May	3,360	340	1,102	1.97	2.27
June	436	220	289	.517	.58
July	718	198	304	.544	.63
August	556	153	223	.399	.46
September	272	131	156	.279	.31
The year	3,940	131	685	1.23	16.64

Pine Creek at Cedar Run, Pa.

Location.- Water-stage recorder, lat. 41°31'20", long. 77°26'55", at highway bridge at Cedar Run, Lycoming County, about 2,000 feet below mouth of Cedar Run. Zero of gage is 781.96 feet above mean sea level.
Drainage area.- 604 square miles.
Records available.- October 1918 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; July 1918 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 16 years (1919-35), 723 second-feet.
Extremes.- Maximum discharge during year, 5,330 second-feet Jan. 9; maximum gage height, 5.00 feet Mar. 6 (affected by ice); minimum discharge, 52 second-feet Sept. 27 (gage height, 1.05 feet).
1918-35: Maximum discharge, about 17,500 second-feet (revised) Apr. 6, 7, 1924 (gage height, 8.6 feet, from graph based on gage readings); minimum, 5.1 second-feet Sept. 6, 1929 (gage height, 0.86 foot).
Remarks.- Records good except those estimated for periods of ice effect, Dec. 11-20, Dec. 27 to Jan. 9, Jan. 25 to Mar. 6, which are fair.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	496	141	2,940	320	310	1,100	1,620	683	270	228	190	96
2	380	150	3,840	300	370	1,000	1,540	605	240	200	156	85
3	320	146	2,860	350	340	1,600	1,340	648	223	180	212	75
4	270	260	2,240	320	310	1,600	1,180	971	246	170	223	91
5	246	656	1,690	290	270	1,200	1,060	1,000	347	160	166	174
6	223	760	1,330	320	250	2,500	1,030	1,140	246	150	133	151
7	217	728	1,110	450	230	2,230	943	2,900	217	141	192	103
8	195	656	963	1,300	215	1,680	882	3,940	206	446	331	92
9	170	597	784	3,000	210	1,420	933	3,140	276	1,260	318	85
10	155	526	683	4,960	210	1,280	1,060	3,940	246	958	283	118
11	141	541	620	3,940	210	1,710	1,960	3,330	195	734	1,060	112
12	133	526	560	2,770	200	1,570	3,840	2,680	175	587	618	89
13	124	496	520	1,940	190	2,360	3,840	2,100	155	893	448	79
14	116	473	480	1,590	185	1,890	3,140	1,700	141	654	412	72
15	111	408	450	1,260	350	1,630	3,040	1,360	124	515	350	72
16	107	394	430	1,050	800	2,060	2,950	1,110	116	508	281	75
17	103	387	430	912	640	1,320	2,540	963	111	384	269	68
18	100	401	430	852	480	1,170	2,140	823	216	312	223	62
19	93	470	560	746	390	943	1,750	728	783	257	190	57
20	89	630	780	700	360	1,970	1,540	639	813	228	170	77
21	93	613	581	830	340	2,780	1,400	589	630	248	156	112
22	100	630	430	1,520	330	2,860	1,250	549	683	245	161	85
23	111	1,060	367	1,160	320	2,540	1,100	518	719	228	162	75
24	103	2,190	333	892	310	2,310	974	480	573	305	128	65
25	96	1,890	314	760	600	1,930	862	437	589	324	112	60
26	116	1,570	324	660	1,300	1,630	756	401	466	338	103	57
27	170	1,310	500	580	1,500	1,360	683	367	387	251	96	55
28	180	1,170	440	500	1,200	1,530	665	340	360	218	116	62
29	175	1,230	480	440		1,770	613	327	301	201	120	88
30	150	1,370	380	390		1,770	746	320	263	180	96	85
31	137		340	330		1,740		288		170	92	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	496	89	168	0.278	0.32
November	2,190	141	746	1.24	1.38
December	3,840	314	909	1.50	1.73
January	4,960	290	1,143	1.89	2.18
February	1,500	185	444	.735	.77
March	2,860	943	1,757	2.91	3.36
April	3,840	665	1,579	2.61	2.91
May	3,940	288	1,259	2.08	2.40
June	813	111	344	.570	.64
July	1,260	141	377	.624	.72
August	1,060	92	244	.404	.47
September	174	55	85.9	.142	.16
The year	4,960	55	758	1.25	17.04

Lycoming Creek near Trout Run, Pa.

Location.- Chain gage, lat. 41°25'05", long. 77°02'00", at highway bridge 2 3/4 miles upstream from Trout Run, Lycoming County. Zero of gage is 693.4 feet above mean sea level.
Drainage area.- 173 square miles.
Records available.- October 1919 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; December 1913 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 18 years (1914-16, 1919-35), 260 second-feet.
Extremes.- Maximum discharge during year, 5,230 second-feet Dec. 1 (gage height, 9.4 feet, from graph based on gage readings); minimum, 16 second-feet Sept. 27 (gage height, 1.69 feet).
1913-35: Maximum discharge, about 15,200 second-feet (revised) Nov. 16, 1926 (gage height, 16.3 feet); minimum, 6.0 second-feet Sept. 20-22, 1932 (gage height, 1.45 feet).
Remarks.- Records good except those estimated for periods of ice effect, Jan. 1-7, Jan. 25 to Feb. 25, which are fair.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	346	68	3,420	77	101	177	367	346	86	47	53	21
2	260	66	2,290	74	105	147	367	270	73	46	56	22
3	206	63	1,010	84	115	203	303	278	56	41	58	22
4	177	313	845	74	105	221	284	432	96	38	59	29
5	155	409	665	73	95	183	256	388	98	38	54	58
6	147	420	500	75	88	735	274	432	75	36	47	41
7	140	367	388	90	81	756	240	900	71	48	70	33
8	115	318	315	183	77	388	264	765	68	155	88	29
9	100	274	237	1,040	74	367	288	640	197	455	77	28
10	94	234	218	1,190	70	284	326	1,010	132	346	61	31
11	88	221	203	790	68	322	568	715	94	212	140	28
12	77	200	183	568	67	797	900	640	79	153	113	27
13	73	188	174	432	66	545	1,010	545	70	215	73	24
14	70	171	155	367	65	478	845	455	61	137	63	21
15	66	153	140	288	85	410	955	367	56	113	54	24
16	63	142	135	247	140	590	845	296	50	135	48	22
17	61	142	127	240	160	1,010	790	256	53	105	44	22
18	59	142	120	206	120	845	715	227	92	86	41	21
19	56	140	130	163	105	765	615	200	166	81	38	21
20	53	145	284	153	95	640	522	177	180	84	37	24
21	53	137	171	247	86	1,490	500	166	111	71	33	25
22	54	147	150	367	83	1,190	432	150	147	66	31	25
23	53	378	135	253	83	900	346	147	145	61	29	24
24	52	845	125	160	84	765	303	115	102	234	26	20
25	42	590	118	140	90	640	346	120	96	111	24	19
26	54	455	118	120	234	522	267	111	84	94	24	19
27	88	410	100	112	203	432	215	94	73	77	24	17
28	88	432	100	108	169	522	177	90	70	68	22	19
29	81	1,180	111	105		500	177	98	63	61	21	18
30	73	1,640	92	100		432	432	102	56	56	22	18
31	66		81	100		432		90		58	21	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	346	42	100	0.578	0.67
November	1,640	63	346	2.00	2.23
December	3,420	81	414	2.39	2.76
January	1,190	73	265	1.53	1.76
February	234	65	104	.601	.63
March	1,490	147	571	3.30	3.80
April	1,010	177	464	2.68	2.99
May	1,010	90	343	1.98	2.28
June	197	50	93.3	.539	.60
July	455	36	114	.659	.76
August	140	21	50.0	.289	.33
September	58	17	25.1	.145	.16
The year	3,420	17	242	1.40	18.97

Loyalsock Creek at Loyalsock, Pa.

Location.- Water-stage recorder, lat. 41°19'25", long. 76°54'40", at highway bridge at Loyalsock, Lycoming County. Zero of gage is 585.63 feet above mean sea level.
Drainage area.- 443 square miles.
Records available.- October 1931 to September 1935 in reports of U. S. Geological Survey; July 1925 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 10 years, 684 second-feet.
Extremes.- Maximum discharge during year, about 17,200 second-feet Dec. 1 (gage height, 9.31 feet); minimum, 43 second-feet Sept. 27-30 (gage height, 2.62 feet).
1925-35: Maximum discharge (estimated), 34,000 second-feet Nov. 16, 1926 (gage height, 12.3 feet); minimum, 16 second-feet Sept. 18, 19, 22-25, 1932 (gage height, 2.57 feet).
Remarks.- Records good except those estimated for periods of missing gage height record, Apr. 8-10, Aug. 3-13, which are fair, and those estimated for periods of ice effect, Dec. 10-19, Dec. 30 to Jan. 7, Jan. 20, Jan. 24 to Feb. 26, which are poor.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,850	193	10,500	280	270	872	930	1,210	240	157	170	62
2	1,220	193	6,980	270	300	811	908	897	212	139	495	68
3	911	204	3,390	280	310	859	831	831	186	126	886	68
4	727	620	2,380	270	260	1,050	743	1,140	202	115	710	98
5	598	1,980	1,720	260	240	727	690	1,140	217	107	452	152
6	539	1,380	1,340	270	210	1,110	710	1,080	196	103	331	176
7	539	1,380	1,090	360	200	2,200	670	1,740	170	160	352	122
8	466	1,050	885	766	190	1,340	630	2,400	213	281	405	96
9	383	859	770	2,330	200	990	765	1,720	615	2,390	374	80
10	338	738	680	2,900	190	951	930	2,060	752	2,160	345	80
11	296	650	580	2,060	190	1,130	1,570	1,720	460	1,110	290	80
12	271	588	500	1,380	180	3,000	2,410	1,420	367	728	397	74
13	247	529	430	990	180	2,240	2,450	1,220	278	583	290	68
14	224	493	380	898	170	1,550	2,270	1,090	228	460	241	62
15	209	431	340	811	350	1,240	2,590	942	191	382	212	60
16	198	407	320	661	1,100	1,420	2,760	809	170	485	186	62
17	188	399	320	608	1,100	2,780	1,980	710	157	430	186	65
18	178	407	290	628	800	2,440	1,720	630	183	304	162	60
19	169	407	340	569	600	1,820	1,650	564	285	247	139	57
20	160	391	827	540	500	1,500	1,770	502	382	259	122	71
21	156	367	608	608	440	2,560	1,610	460	345	234	115	71
22	156	345	511	956	420	2,570	1,350	412	318	196	107	77
23	156	639	457	911	410	1,940	1,140	389	331	186	100	74
24	156	2,270	407	740	400	1,730	978	382	311	547	92	65
25	152	1,680	383	620	600	1,420	842	345	399	564	86	57
26	165	1,240	367	500	1,000	1,220	743	311	372	524	77	50
27	209	1,030	479	440	1,370	1,040	660	278	271	350	71	45
28	253	1,030	407	390	898	1,030	630	259	234	265	68	45
29	235	2,190	359	340		1,420	601	240	217	217	65	45
30	214	3,110	320	310		1,140	1,060	271	186	191	62	45
31	204		290	290		1,010		290		175	62	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,850	152	380	0.858	0.99
November	3,110	193	907	2.05	2.29
December	10,500	290	1,247	2.81	3.24
January	2,900	260	750	1.69	1.95
February	1,370	170	467	1.05	1.09
March	3,000	727	1,520	3.43	3.95
April	2,760	601	1,286	2.90	3.24
May	2,400	240	886	2.00	2.31
June	752	157	290	.655	.73
July	2,390	103	457	1.03	1.19
August	886	62	247	.558	.64
September	176	45	74.5	.168	.19
The year	10,500	45	712	1.61	21.81

Penn Creek at Penns Creek, Pa.

Location.- Water-stage recorder, lat. 40°51'35", long. 77°04'05", at bridge on State Highway 104, three quarters of a mile northeast of Penns Creek, Snyder County (revised). Zero of gage is 506.74 feet above mean sea level.
Drainage area.- 301 square miles.
Records available.- October 1931 to September 1935 in reports of U. S. Geological Survey; October 1929 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Extremes.- Maximum discharge during year, 6,010 second-feet Dec. 1 (gage height, 8.52 feet); minimum, 11 second-feet Sept. 27 (gage height, 0.97 foot); minimum daily discharge, 42 second-feet Sept. 17, 26, 27.
1929-35: Maximum discharge, about 12,900 second-feet Sept. 16, 1934 (gage height, 13.00 feet); minimum, 7.0 second-feet Sept. 27, 1932 (gage height, 0.85 foot); minimum daily discharge, 26 second-feet Nov. 28-30, 1930.
Remarks.- Records good except those estimated for periods of ice effect, Jan. 5, 6, 18-21, Jan. 26 to Feb. 15, and for period of recorder failure, Aug. 25-29, which are fair. Regulation from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,400	206	4,540	268	260	564	570	420	245	166	98	52
2	1,080	200	3,920	278	260	669	536	389	230	157	97	63
3	915	184	2,450	370	290	1,360	493	430	224	144	93	74
4	790	608	1,940	286	320	1,090	458	393	238	138	104	120
5	670	675	1,540	260	270	730	434	376	241	144	87	121
6	628	576	1,250	280	240	915	448	416	213	141	88	92
7	582	531	1,080	325	220	1,180	411	879	203	141	98	68
8	488	478	948	412	220	1,220	443	1,180	210	149	131	59
9	448	434	820	854	240	980	695	1,010	278	355	117	57
10	398	398	730	1,010	320	915	790	1,180	252	276	99	64
11	384	393	634	850	310	1,010	1,040	1,040	210	205	98	62
12	362	367	622	700	290	1,640	1,250	915	187	168	95	63
13	342	350	576	616	280	1,430	1,430	850	193	152	92	56
14	317	346	504	582	290	1,220	1,280	850	177	138	132	49
15	305	313	453	523	500	1,080	1,220	760	160	137	130	44
16	286	298	430	492	1,110	1,110	1,140	646	154	226	103	56
17	271	286	425	456	760	1,110	1,010	587	152	188	84	42
18	267	274	389	460	639	980	915	542	252	144	81	51
19	252	267	416	440	402	915	820	498	573	124	72	48
20	245	260	520	420	346	915	760	453	430	112	72	66
21	238	252	420	400	329	1,010	700	434	393	119	71	83
22	234	244	380	514	292	948	646	407	380	137	66	70
23	220	561	354	448	248	948	587	380	321	124	65	61
24	216	943	338	335	346	1,080	531	362	286	116	64	45
25	206	730	321	358	376	948	493	346	252	138	55	63
26	220	634	350	330	759	850	448	321	227	141	52	42
27	248	582	396	310	896	790	420	305	203	123	50	42
28	309	640	389	300	486	760	411	286	193	107	60	51
29	263	915	358	290		760	398	274	180	115	58	53
30	230	1,280	431	280		658	463	271	166	101	55	49
31	203		355	270		599		256		108	52	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,400	203	420	1.40	1.61
November	1,280	184	474	1.57	1.75
December	4,540	321	912	3.03	3.49
January	1,010	260	442	1.47	1.70
February	1,110	220	404	1.34	1.40
March	1,640	564	980	3.26	3.76
April	1,430	398	708	2.35	2.62
May	1,180	256	563	1.87	2.16
June	573	152	247	.821	.92
July	355	101	153	.508	.59
August	132	50	84.5	.281	.32
September	121	42	62.2	.207	.23
The year	4,540	42	454	1.51	20.55

Mahantango Creek East near Dalmatia, Pa.

Location.- Water-stage recorder, lat. 40°36'40", long. 76°54'45", at highway bridge 2 miles above mouth and 3¼ miles south of Dalmatia, Northumberland County. Zero of gage is 400.50 feet above mean sea level.
Drainage area.- 162 square miles.
Records available.- October 1931 to September 1935 in reports of U. S. Geological Survey; October 1929 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Extremes.- Maximum discharge during year, about 8,940 second-feet Dec. 1 (gage height, 13.00 feet); minimum, 11 second-feet Sept. 27 (gage height, 1.15 feet); minimum daily discharge, 16 second-feet Sept. 18, 26.
1929-35: Maximum discharge, about 9,850 second-feet Aug. 24, 1933 (gage height, 13.66 feet); minimum, 1.5 second-feet Sept. 21, 1932 (gage height, 0.84 foot).
Remarks.- Records good except those for extremely high stages and those estimated for periods of ice effect, Jan. 4-8, Jan. 24 to Feb. 17, which are poor. Some regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	724	61	5,620	130	100	372	218	167	57	52	120	21
2	441	88	5,170	121	98	368	215	144	54	46	264	22
3	314	71	1,660	142	115	364	196	161	49	43	211	26
4	239	314	1,030	130	120	326	175	144	51	38	158	69
5	190	883	700	120	105	291	167	134	57	35	260	100
6	188	745	534	130	100	308	184	134	50	36	299	66
7	199	745	429	150	95	333	164	167	47	32	164	50
8	145	534	354	200	92	350	165	187	77	371	164	36
9	121	391	300	328	90	308	527	164	130	996	127	31
10	106	308	264	339	130	291	895	196	118	900	102	32
11	99	261	252	318	120	326	720	202	76	477	89	32
12	94	221	216	258	112	494	608	175	58	333	81	26
13	85	196	204	218	108	680	556	175	52	251	68	23
14	78	182	170	207	140	576	473	187	46	199	68	20
15	74	153	149	170	300	514	425	172	43	723	62	20
16	66	138	134	172	550	503	404	150	44	1,460	100	22
17	64	128	132	158	500	473	361	140	37	430	60	21
18	65	119	119	156	462	404	319	132	39	347	61	16
19	62	113	133	136	336	361	288	122	50	264	46	17
20	56	106	302	136	271	350	264	115	54	247	43	23
21	52	103	170	147	208	364	240	107	46	275	40	32
22	53	96	149	207	208	347	224	104	316	184	41	25
23	57	139	138	165	184	308	205	96	208	437	39	21
24	51	395	126	150	175	305	190	92	132	279	38	19
25	50	361	122	140	190	288	178	87	118	338	30	17
26	56	304	146	130	771	271	161	79	90	397	28	16
27	70	264	168	120	721	251	153	76	75	268	27	17
28	96	242	153	115	433	251	150	68	70	202	28	17
29	86	297	163	110		305	142	67	61	161	26	19
30	71	732	154	105		240	211	65	61	130	24	24
31	60		109	102		218		62		122	23	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	724	50	133	0.821	0.95
November	883	61	290	1.79	2.00
December	5,620	109	628	3.88	4.47
January	339	102	168	1.04	1.20
February	771	90	244	1.51	1.57
March	680	218	359	2.22	2.56
April	895	142	306	1.89	2.11
May	202	62	131	.809	.93
June	316	37	78.9	.487	.54
July	1,460	32	325	2.01	2.32
August	299	23	93.3	.576	.66
September	100	16	29.3	.181	.20
The year	5,620	16	233	1.44	19.51

Frankstown Branch of Juniata River at Williamsburg, Pa.

Location.- Water-stage recorder, lat. 40°27'45", long. 78°12'00", at highway bridge at Williamsburg, Blair County. Zero of gage is 831.78 feet above mean sea level.
Drainage area.- 291 square miles.
Records available.- October 1919 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; October 1916 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 16 years (1919-35), 375 second-feet.
Extremes.- Maximum discharge during year, 3,430 second-feet Mar. 2 (gage height, 7.76 feet); minimum, 45 second-feet Sept. 25 (gage height, 1.47 feet); minimum daily discharge, 63 second-feet Sept. 25, 27.
1916-35: Maximum discharge, 13,100 second-feet (revised) Oct. 23, 1929 (gage height, 13.9 feet); minimum, 13 second-feet July 24, 1934 (gage height, 0.97 foot); minimum daily discharge (estimated), 31 second-feet Dec. 24, 25, 1930.
Maximum stage known, 19.1 feet June 1, 1889 (discharge, about 35,500 second-feet).
Remarks.- Records good except those estimated for periods of ice effect, Jan. 1-6, Jan. 25 to Feb. 2, which are fair. Regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	772	101	1,690	310	170	567	353	236	150	100	140	78
2	467	107	1,530	260	270	1,720	344	582	141	95	171	88
3	359	98	912	280	408	2,640	310	1,010	136	88	196	106
4	288	285	720	290	275	1,700	283	780	145	96	207	151
5	244	311	531	210	229	1,310	267	650	138	111	140	251
6	239	254	429	240	195	1,580	368	776	126	95	119	127
7	224	242	374	302	134	1,910	291	2,720	123	94	279	98
8	176	206	327	421	206	1,420	344	2,300	123	102	286	87
9	152	186	297	1,620	269	945	628	1,280	204	400	306	85
10	140	172	240	1,700	321	825	847	1,990	143	198	298	88
11	150	172	185	1,240	239	1,100	970	1,370	120	152	500	83
12	134	163	191	816	224	1,680	1,120	1,040	115	123	309	78
13	116	157	224	630	263	1,400	1,310	895	108	112	258	75
14	110	178	203	650	332	1,100	1,070	780	100	101	288	75
15	107	150	182	493	878	870	895	610	96	206	227	74
16	102	140	190	416	1,150	848	780	489	98	240	193	71
17	100	134	201	416	1,100	758	670	436	110	128	166	69
18	100	136	169	429	763	630	550	362	122	112	149	67
19	95	133	155	336	570	608	478	319	344	111	135	83
20	94	131	243	361	497	681	419	291	316	144	128	94
21	91	129	184	706	396	759	371	283	174	112	122	80
22	91	128	180	1,140	389	670	350	257	230	148	121	69
23	91	326	167	735	337	837	330	259	188	274	109	65
24	89	514	184	418	374	825	294	249	150	281	100	65
25	89	362	180	320	456	690	275	219	136	656	95	63
26	112	316	465	280	869	630	262	203	123	503	91	64
27	124	291	573	250	738	531	242	190	116	288	91	63
28	131	283	374	230	566	550	242	178	112	218	91	64
29	113	484	465	210		516	234	176	107	200	87	67
30	101	778	525	190		409	272	197	104	160	81	74
31	94		365	170		347		165		145	87	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	772	89	171	0.588	0.68
November	778	98	236	.811	.90
December	1,690	155	408	1.40	1.61
January	1,700	170	518	1.78	2.05
February	1,150	134	451	1.55	1.61
March	2,640	347	1,002	3.44	3.97
April	1,310	234	506	1.74	1.94
May	2,720	165	687	2.36	2.72
June	344	96	147	.505	.56
July	656	88	187	.643	.74
August	500	81	180	.619	.71
September	251	63	86.7	.298	.33
The year	2,720	63	382	1.31	17.82

Juniata River at Newport, Pa.

Location.- Water-stage recorder, lat. 40°28'45", long. 77°07'45", at highway bridge at Newport, Perry County, 1,000 feet above Little Buffalo Creek. Zero of gage is 363.16 feet above mean sea level.
Drainage area.- 3,354 square miles.
Records available.- March 1899 to December 1913, October 1918 to September 1921, October 1923 to September 1926, October 1931 to September 1935 in reports of U. S. Geological Survey; March 1899 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 34 years (1899-1905, 1907-35), 4,408 second-feet.
Extremes.- Maximum discharge during year, 41,400 second-feet Dec. 1 (gage height, 14.07 feet); minimum, 406 second-feet Sept. 28 (gage height, 2.86 feet).
1899-1935: Maximum discharge, about 118,000 second-feet (revised) Mar. 1, 1902 (gage height, 25.3 feet); minimum (estimated), 260 second-feet Aug. 27, 1925 (gage height, 2.71 feet); minimum discharge, 286 second-feet Sept. 25, 1932.
Maximum stage known, 35.9 feet June 1, 1889 (revised) (discharge, about 237,000 second-feet).
Remarks.- Records good except those estimated for period of ice effect, Jan. 27 to Feb. 10, which are fair. Slight regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11,200	1,280	29,800	3,470	2,200	7,980	4,340	2,950	1,820	1,110	1,500	732
2	7,160	1,330	36,700	2,650	3,000	8,140	4,210	2,880	1,730	982	1,300	718
3	5,480	1,230	22,600	2,840	3,600	12,000	3,890	3,840	1,670	902	1,260	776
4	4,480	2,250	14,900	3,200	3,200	15,600	3,630	6,220	1,560	902	1,520	886
5	3,910	3,630	10,600	2,910	2,800	12,700	3,470	7,000	1,520	870	1,740	1,160
6	3,200	4,080	8,140	2,540	2,400	11,200	3,500	6,380	1,500	870	2,080	1,610
7	2,680	3,420	6,680	2,700	2,200	12,000	3,550	7,000	1,480	950	1,960	2,080
8	2,250	3,220	5,620	3,300	2,500	13,400	3,680	14,500	1,320	2,790	1,610	2,190
9	2,060	2,700	4,900	5,580	5,000	11,600	6,550	14,500	1,540	5,930	1,730	1,690
10	2,080	2,360	4,080	11,600	14,000	9,330	8,650	12,300	1,760	3,960	1,920	1,420
11	1,940	2,250	3,520	13,400	9,500	8,650	10,900	14,900	1,730	4,340	1,980	1,060
12	1,760	2,120	3,120	11,200	6,680	10,200	12,000	14,100	1,610	3,220	2,700	902
13	1,730	2,000	2,580	8,650	4,480	13,400	13,000	10,900	1,390	2,340	3,780	966
14	1,540	1,880	3,300	6,840	3,550	12,700	12,700	9,160	1,260	1,500	3,150	934
15	1,460	1,880	3,070	5,920	4,480	11,200	11,600	7,980	1,110	1,660	2,880	807
16	1,370	1,670	2,950	5,180	6,840	9,500	10,000	6,680	1,030	3,240	2,270	823
17	1,410	1,610	2,720	4,760	12,300	8,820	8,820	5,620	998	2,400	2,000	1,250
18	1,280	1,540	2,630	4,340	13,400	7,810	7,480	4,900	998	2,380	1,780	1,030
19	1,250	1,610	2,650	4,080	10,900	6,840	6,380	4,340	1,210	1,390	1,690	718
20	1,260	1,410	2,880	3,630	7,980	6,680	5,620	4,080	1,610	1,080	1,250	703
21	1,260	1,500	2,840	3,810	6,220	6,840	5,040	3,500	2,670	1,260	966	659
22	1,260	1,500	2,750	4,760	5,330	6,840	4,620	3,220	2,580	1,180	1,090	659
23	1,180	1,970	2,540	5,770	4,900	7,000	4,080	3,050	2,230	1,480	1,060	644
24	1,080	3,520	2,580	6,070	4,340	7,480	3,910	2,860	2,170	1,460	1,010	618
25	1,160	4,340	2,340	5,040	4,340	7,320	3,580	2,790	1,730	2,450	966	528
26	1,200	3,810	2,470	3,680	5,910	6,840	3,300	2,540	1,710	4,220	902	471
27	1,280	3,680	2,800	3,200	11,200	6,220	3,050	2,440	1,420	4,760	823	428
28	1,500	3,450	4,210	2,800	10,900	5,920	3,000	2,140	1,210	3,270	791	482
29	1,630	3,810	4,080	2,500		5,620	2,910	1,980	1,110	2,430	776	541
30	1,420	7,500	4,080	2,300		5,480	2,980	2,000	1,130	2,140	747	528
31	1,350		4,080	2,200		4,900		1,900		1,800	732	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	11,200	1,080	2,381	0.710	0.82
November	7,500	1,230	2,618	.781	.87
December	36,700	2,340	6,716	2.00	2.31
January	13,400	2,200	4,868	1.45	1.67
February	14,000	2,200	6,220	1.85	1.93
March	15,600	4,900	9,039	2.69	3.10
April	13,000	2,910	6,015	1.79	2.00
May	14,900	1,900	6,085	1.81	2.09
June	2,670	998	1,560	.465	.52
July	5,930	870	2,234	.666	.77
August	3,780	732	1,612	.481	.55
September	2,190	428	934	.278	.31
The year	36,700	428	4,189	1.25	16.94

Shaver Creek near Petersburg, Pa.

Location.- Chain gage, lat. 40°36'40", long. 78°00'25", at highway bridge 3½ miles northeast of Petersburg, Huntingdon County, and 4½ miles above mouth. Zero of gage is 691.38 feet above mean sea level.
Drainage area.- 46.4 square miles.
Records available.- October 1931 to September 1935 in reports of U. S. Geological Survey; October 1929 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Extremes.- Maximum discharge during year, about 1,200 second-feet Dec. 1 (gage height, 6.6 feet, from graph based on gage readings); minimum, 2.5 second-feet Sept. 30 (gage height, 0.57 foot).
1929-35: Maximum discharge, about 1,340 second-feet Apr. 7, 1933 (gage height, 7.0 feet, from graph based on gage readings); minimum, 0.9 second-foot Sept. 19, 1932 (gage height, 0.46 foot).
Remarks.- Records poor. Discharge estimated for periods of ice effect, Dec. 10-19, Dec. 31 to Jan. 8, Jan. 15-17, Jan. 24 to Feb. 15, Feb. 22-25. Some regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	66	14	634	84	33	199	50	27	16	11	12	4.6
2	49	14	243	80	35	235	44	53	14	10	13	6.3
3	37	11	132	65	42	341	41	58	14	12	21	7.8
4	30	103	120	58	35	168	38	43	15	12	13	13
5	26	70	81	52	30	168	37	42	14	12	9.7	14
6	28	66	66	52	26	248	45	71	12	9.2	9.2	8.5
7	24	47	62	56	25	248	37	461	11	36	19	7.0
8	18	37	51	90	26	176	46	222	12	120	41	6.3
9	14	29	47	439	30	120	129	132	26	62	29	5.1
10	14	27	42	277	27	114	108	210	15	48	18	5.1
11	14	29	42	153	25	160	86	132	12	30	26	4.8
12	12	24	60	102	28	279	102	102	9.7	23	17	5.1
13	10	23	40	86	25	168	139	96	8.8	18	23	4.0
14	11	19	36	77	40	132	114	86	8.5	16	31	4.6
15	11	23	32	70	100	120	102	76	9.2	20	18	5.6
16	8.8	16	31	62	155	114	86	62	7.0	70	14	5.1
17	9.2	16	30	56	201	102	76	53	8.8	31	12	4.6
18	11	16	30	66	91	86	66	47	34	25	10	4.8
19	10	16	70	66	71	91	58	42	53	18	10	4.0
20	12	14	53	86	62	91	53	40	76	16	8.5	18
21	11	14	41	81	50	132	51	38	32	16	8.5	6.0
22	12	13	39	108	47	86	47	35	53	18	8.1	4.3
23	12	94	37	71	45	108	42	34	40	19	6.7	4.3
24	11	119	38	60	50	86	38	30	26	19	5.6	4.0
25	11	53	37	54	65	76	35	27	20	37	5.6	4.0
26	21	42	110	50	96	66	32	25	16	24	6.0	4.6
27	21	38	91	46	76	62	31	26	14	16	7.0	3.0
28	32	38	66	42	232	66	32	24	14	28	6.3	3.3
29	19	164	66	40		66	29	21	13	21	4.8	3.5
30	12	100	76	36		53	33	21	12	12	5.6	2.7
31	12		64	33		51		17		13	4.6	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	66	8.8	19.0	0.409	0.47
November	164	11	43.0	.927	1.03
December	634	30	82.8	1.78	2.05
January	439	33	87.0	1.88	2.17
February	232	25	63.1	1.36	1.42
March	341	51	136	2.93	3.38
April	139	29	60.9	1.31	1.46
May	461	17	75.9	1.64	1.89
June	76	7.0	20.5	.442	.49
July	120	9.2	26.5	.571	.66
August	41	4.6	13.7	.295	.34
September	18	2.7	5.93	.128	.14
The year	634	2.7	53.0	1.14	15.50

Standing Stone Creek near Huntingdon, Pa.

Location.- Water-stage recorder, lat. 40°31'25", long. 77°58'15", at bridge on State Highway 545, 3¼ miles northeast of Huntingdon, Huntingdon County, and 3¼ miles above mouth. Zero of gage is 645.82 feet above mean sea level.
Drainage area.- 128 square miles.
Records available.- October 1931 to September 1935 in reports of U. S. Geological Survey; October 1929 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Extremes.- Maximum discharge during year, 1,680 second-feet Dec. 1 (gage height, 5.41 feet); minimum, 14 second-feet Sept. 18 (gage height, 0.92 foot).
1929-35: Maximum discharge, about 2,730 second-feet (revised) May 8, 1931 (gage height, 6.75 feet); minimum, 2.8 second-feet Feb. 11, 1931 (gage height, 0.64 foot); minimum daily discharge, 7.6 second-feet Sept. 12-14, 18-26, 1932.
Maximum stage known, 9.38 feet June 1, 1889 (discharge, about 5,430 second-feet).
Remarks.- Records good except those estimated for periods of recorder failure, Oct. 1-7, Sept. 3-7, and for periods of ice effect, Dec. 10-14, Jan. 19, Jan. 25 to Feb. 17, which are fair. Some regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	400	45	1,010	108	56	206	142	97	74	46	36	18
2	300	49	940	119	58	358	136	132	69	42	58	20
3	200	42	441	116	72	460	128	184	68	41	56	30
4	150	133	352	108	60	386	115	136	73	42	50	100
5	100	218	271	90	52	320	109	119	73	45	39	300
6	90	174	383	102	40	423	130	238	66	44	33	70
7	100	142	192	119	30	591	111	1,070	65	40	40	23
8	66	113	167	174	50	471	128	749	62	116	48	18
9	59	95	153	743	54	334	324	463	90	387	53	19
10	53	86	140	669	58	294	427	690	76	193	61	20
11	50	84	125	423	48	376	412	478	60	107	81	17
12	52	79	135	287	42	685	352	369	53	83	50	17
13	48	74	130	218	46	534	394	331	50	74	100	15
14	45	71	120	202	52	394	348	307	52	66	362	16
15	44	65	108	189	100	327	310	256	45	70	86	16
16	44	62	106	156	300	324	284	210	45	170	55	17
17	41	59	105	153	320	310	241	189	45	88	41	17
18	39	57	93	154	255	258	207	172	74	68	33	14
19	39	55	96	140	162	244	184	156	111	60	29	17
20	36	53	162	123	150	274	167	142	261	55	28	48
21	35	52	103	153	124	318	151	134	107	50	26	27
22	35	50	93	232	113	290	142	130	115	55	26	20
23	37	142	86	174	102	287	132	121	105	66	24	20
24	34	316	84	110	120	274	121	115	84	57	22	19
25	34	160	83	92	147	238	113	107	71	87	21	17
26	46	125	149	80	303	216	105	99	65	77	20	17
27	62	109	186	75	263	187	99	95	57	52	20	17
28	83	101	126	70	194	192	101	90	56	48	21	17
29	65	274	136	65		210	95	86	52	56	19	17
30	49	398	129	60		165	105	86	49	42	19	17
31	41		88	58		149		81		37	18	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	400	34	79.9	0.624	0.72
November	398	42	116	.906	1.01
December	1,010	83	209	1.63	1.88
January	743	58	179	1.40	1.61
February	320	30	120	.938	.98
March	685	149	326	2.55	2.94
April	427	95	194	1.52	1.70
May	1,070	81	246	1.92	2.21
June	261	45	75.8	.592	.66
July	387	37	79.5	.621	.72
August	362	18	50.8	.397	.46
September	300	14	33.3	.260	.29
The year	1,070	14	143	1.12	15.18

Raystown Branch of Juniata River at Saxton, Pa.

Location.- Water-stage recorder, lat. 40°12'55", long. 78°15'55", at highway bridge half a mile west of Saxton, Bedford County. Zero of gage is 794.73 feet above mean sea level.
Drainage area.- 756 square miles.
Records available.- October 1918 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; August 1911 to September 1935 in reports of Pennsylvania Department of Forests and Waters. Records prior to October 1931 obtained at a site 0.8 mile downstream.
Average discharge.- 24 years, 925 second-feet.
Extremes.- Maximum discharge during year, 6,180 second-feet May 10 (gage height, 6.23 feet); minimum, 121 second-feet Sept. 30 (gage height, 1.18 feet).
1911-35: Maximum discharge, about 29,000 second-feet May 12, 13, 1924 (gage height, 13.6 feet, from graph based on gage readings at former site and datum); minimum, 52 second-feet Oct. 17, 18, 1930.
Maximum stage known, 23.0 feet, at present site, June 1, 1889 (discharge, about 71,300 second-feet).
Remarks.- Records good except those estimated for periods of ice effect, Dec. 12-14, Jan. 26 to Feb. 10, which are fair.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,670	157	2,900	785	700	1,800	878	493	312	187	241	168
2	1,000	153	4,780	776	620	1,800	832	704	285	187	256	168
3	704	147	2,800	860	640	2,210	758	2,780	275	179	492	190
4	538	210	1,800	925	680	2,460	695	2,460	280	168	1,030	309
5	430	292	1,400	692	620	2,210	643	1,970	275	157	832	1,210
6	378	496	1,070	523	600	2,090	651	1,690	270	157	523	1,110
7	365	371	869	704	580	2,210	739	2,900	246	153	430	660
8	359	340	749	841	640	2,270	678	4,120	241	219	521	444
9	290	296	634	1,630	800	1,690	795	2,860	312	1,180	776	359
10	251	285	508	3,500	1,200	1,380	1,370	3,840	390	1,160	1,070	318
11	224	266	342	3,140	1,200	1,540	2,690	4,450	328	537	2,550	290
12	202	251	360	2,150	878	1,910	2,660	3,000	251	359	1,510	266
13	190	246	340	1,580	708	2,530	3,210	2,340	220	285	906	228
14	175	232	400	1,350	810	2,340	3,070	2,090	207	237	758	207
15	164	224	374	1,250	1,230	1,970	2,460	1,690	190	235	695	190
16	164	220	378	1,010	4,250	1,800	2,030	1,340	183	487	538	175
17	160	202	359	925	4,400	1,580	1,640	1,150	175	318	423	171
18	157	190	321	1,040	3,630	1,440	1,390	1,020	192	266	352	164
19	153	183	272	1,060	2,460	1,310	1,170	897	424	202	312	160
20	147	187	335	768	1,910	1,280	1,030	804	561	175	285	194
21	144	187	392	900	1,480	1,450	915	721	645	164	270	187
22	134	187	382	1,860	1,300	1,860	850	695	508	553	246	198
23	140	226	324	2,400	1,170	1,540	767	618	577	791	232	190
24	137	580	307	1,910	1,070	1,800	695	561	437	691	215	168
25	130	912	312	1,220	1,260	1,640	626	516	335	766	198	150
26	144	695	414	950	2,870	1,580	569	450	296	570	183	140
27	147	602	1,210	750	3,420	1,410	523	416	280	543	187	144
28	164	530	1,120	660	2,210	1,250	493	384	246	655	190	140
29	157	615	1,070	630		1,270	486	359	220	423	207	127
30	157	1,690	1,150	610		1,090	508	346	202	324	215	124
31	153		1,010	660		934		335		280	187	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,670	130	301	0.398	0.46
November	1,690	147	372	.492	.55
December	4,780	272	925	1.22	1.41
January	3,500	523	1,228	1.62	1.87
February	4,400	580	1,548	2.05	2.14
March	2,530	934	1,730	2.29	2.64
April	3,210	486	1,194	1.58	1.76
May	4,450	335	1,548	2.05	2.36
June	645	175	312	.413	.46
July	1,180	153	407	.538	.62
August	2,550	183	543	.718	.83
September	1,210	124	285	.377	.42
The year	4,780	124	864	1.14	15.52

Dunning Creek at Yount, Pa.

Location.- Chain gage, lat. 40°03'30", long. 78°28'30", at highway bridge at Yount, Bedford County, 3 miles above mouth and 3½ miles northeast of Bedford. Zero of gage is 1,046.43 feet above mean sea level.
Drainage area.- 191 square miles.
Records available.- October 1931 to September 1935 in reports of U. S. Geological Survey; November 1929 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Extremes.- Maximum discharge during year, 1,900 second-feet Dec. 1 (gage height, 5.8 feet, from graph based on gage readings); minimum, 24 second-feet July 3-5 (gage height, 0.70 foot).
1929-35: Maximum discharge, about 4,400 second-feet (revised) Mar.15, 1933 (gage height, 8.8 feet, from graph based on gage readings); minimum, 4.9 second-feet July 28, 1930 (gage height, 0.46 foot).
Remarks.- Records good except those estimated for periods of ice effect, Dec. 12-15, Jan. 28 to Feb. 8, which are fair. Slight regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	463	42	1,320	403	170	418	205	95	57	36	76	40
2	300	54	1,240	344	160	557	180	380	51	31	409	47
3	218	43	690	358	180	890	156	622	50	26	494	66
4	168	166	525	286	150	925	147	557	57	24	418	340
5	128	149	373	231	135	725	136	463	51	24	244	316
6	132	168	286	231	120	800	168	418	45	34	168	149
7	111	132	244	231	115	1,070	130	1,240	42	30	358	97
8	82	121	192	330	110	800	145	970	47	42	524	78
9	66	111	168	1,170	145	525	244	690	107	673	690	69
10	58	99	145	1,420	180	433	463	1,250	55	180	908	76
11	52	93	119	960	143	622	525	840	43	121	969	60
12	48	87	115	589	145	925	690	656	40	72	463	51
13	44	82	120	433	192	880	880	525	37	66	330	44
14	43	91	100	463	218	690	760	494	33	52	433	40
15	41	72	92	344	706	525	622	358	32	42	231	38
16	41	68	85	272	970	494	494	286	34	133	180	37
17	37	64	103	272	1,170	463	403	258	36	54	136	36
18	36	64	78	315	656	403	330	231	32	40	115	33
19	35	64	107	218	494	358	272	192	168	38	99	33
20	34	64	115	244	403	373	231	168	248	34	84	60
21	33	61	97	409	300	800	205	156	80	33	78	43
22	33	51	82	800	286	557	192	143	193	585	78	36
23	31	186	68	622	258	589	168	126	103	345	66	33
24	34	358	84	463	286	622	152	113	74	156	57	30
25	32	330	84	388	466	557	134	101	66	128	52	28
26	47	272	314	358	1,020	463	121	89	54	370	47	28
27	47	244	403	272	656	373	115	78	47	272	69	28
28	48	192	358	240	494	358	109	71	44	154	63	28
29	43	496	418	220		300	103	68	38	121	48	28
30	38	800	403	200		244	113	82	34	87	43	28
31	35		344	180		205		66		72	42	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	463	31	82.5	0.432	0.50
November	800	42	161	.843	.94
December	1,320	68	286	1.50	1.73
January	1,420	180	428	2.24	2.58
February	1,170	110	369	1.93	2.01
March	1,070	205	579	3.03	3.49
April	880	103	286	1.50	1.67
May	1,250	66	380	1.99	2.29
June	248	32	66.6	.349	.39
July	673	24	131	.686	.79
August	969	42	257	1.35	1.56
September	340	28	67.3	.352	.39
The year	1,420	24	258	1.35	18.34

Brush Creek at Gapsville, Pa.

Location.- Water-stage recorder, lat. 39°57'20", long. 78°15'15", at highway bridge three quarters of a mile northwest of Gapsville, Bedford County, and 5½ miles above confluence with Shaffer Creek. Zero of gage is 1,122.39 feet above mean sea level.
Drainage area.- 36.8 square miles.
Records available.- October 1931 to September 1935 in reports of U. S. Geological Survey; November 1929 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Extremes.- Maximum discharge during year, about 1,100 second-feet Dec. 1 (gage height, 4.76 feet); minimum, 0.9 second-foot Nov. 3 (gage height, 0.79 foot); minimum daily discharge, 2.2 second-feet Sept. 29.
1929-35: Maximum discharge, that of Dec. 1, 1934 (maximum previously published for Sept. 16, 1934, is in error; revised discharge, about 1,020 second-feet); minimum, 0.2 second-foot Aug. 28, Sept. 12, 20-23, 1932.
Remarks.- Records fair. Discharge estimated for periods of ice effect, Jan. 4-8, Jan. 24 to Feb. 6, and for periods of recorder failure, June 2-8, Sept. 23, 24. Regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	64	4.5	745	42	62	118	51	26	14	5.8	5.2	3.7
2	48	5.6	476	60	70	111	48	101	14	4.8	11	9.5
3	35	5.4	254	46	66	113	44	147	14	3.8	24	10
4	30	26	179	40	62	106	40	155	16	4.8	17	55
5	23	22	129	36	54	106	40	136	14	3.8	11	56
6	29	17	101	33	49	98	47	123	13	7.4	7.8	26
7	24	17	82	31	47	93	39	146	12	6.4	16	16
8	17	15	70	40	51	80	40	127	14	5.1	14	11
9	13	14	60	103	51	64	50	111	25	11	13	9.5
10	11	12	47	103	63	62	104	240	15	5.9	12	9.2
11	10	11	50	99	54	78	136	202	11	5.4	22	7.6
12	10	12	97	84	38	99	153	163	10	4.4	14	6.5
13	9.6	12	51	73	35	110	169	134	9.0	4.9	10	5.6
14	9.0	11	32	70	39	104	153	111	8.2	3.7	9.0	5.3
15	8.2	9.0	27	59	130	98	131	88	7.4	4.0	8.4	4.1
16	7.3	9.0	25	52	172	93	108	73	7.7	8.2	8.2	5.3
17	6.6	8.6	25	54	224	87	88	62	7.6	4.7	6.6	4.2
18	6.3	7.7	23	46	186	74	74	54	7.3	4.2	6.4	3.4
19	6.1	7.6	28	39	153	69	63	46	7.9	4.4	5.6	3.3
20	5.5	7.3	31	46	125	64	55	40	11	3.6	6.5	10
21	5.6	6.8	23	58	99	85	50	38	9.0	3.2	4.8	6.7
22	5.0	7.2	22	99	88	78	45	36	15	3.6	7.8	3.4
23	5.3	27	20	87	76	79	40	32	10	3.4	4.7	3.3
24	5.0	47	20	76	69	88	37	29	8.8	13	6.0	3.1
25	5.9	35	20	70	84	82	33	26	7.0	24	4.2	3.1
26	6.5	31	50	62	161	79	31	23	6.0	8.7	4.8	2.7
27	6.8	29	64	58	153	69	29	21	5.6	8.5	6.4	3.0
28	7.0	31	68	56	134	71	27	19	5.7	6.7	6.8	2.8
29	6.6	94	44	54		66	29	18	5.9	7.9	6.1	2.2
30	6.0	154	43	54		56	34	17	6.9	7.0	5.0	3.6
31	5.5		39	68		54		17		5.0	6.0	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	64	5.0	14.1	0.383	0.44
November	154	4.5	23.2	.630	.70
December	745	20	95.0	2.58	2.97
January	103	31	61.2	1.66	1.91
February	224	35	92.7	2.52	2.62
March	118	54	85.0	2.31	2.66
April	169	27	66.3	1.80	2.01
May	240	17	82.6	2.24	2.58
June	25	5.6	10.6	.288	.32
July	24	3.2	6.36	.173	.20
August	24	4.2	9.36	.254	.29
September	56	2.2	9.84	.267	.30
The year	745	2.2	46.2	1.26	17.00

Great Trough Creek near Marklesburg, Pa.

Location.- Water-stage recorder, lat. 40°21'00", long. 78°07'50", at highway bridge half a mile above mouth and 3 miles southeast of Marklesburg, Huntingdon County. Zero of gage is 714.48 feet above mean sea level.
Drainage area.- 84.6 square miles.
Records available.- October 1931 to September 1935 in reports of U. S. Geological Survey; January 1930 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Extremes.- Maximum discharge during year, 976 second-feet July 8; maximum gage height, 4.17 feet Feb. 15 (affected by ice); minimum discharge, 5.9 second-feet Sept. 27 (gage height, 0.73 foot); minimum daily discharge, 6.8 second-feet Sept. 27.
1930-35: Maximum discharge (estimated), 2,180 second-feet May 23, 1931 (gage height, 4.80 feet); minimum, 0.6 second-foot Sept. 22, 23, 1932, Sept. 3, 1934.
Remarks.- Records good except those above 500 second-feet and those estimated for periods of ice effect, Dec. 30 to Jan. 9, Jan. 18-20, Jan. 25 to Feb. 17, and for period of recorder failure, July 24, 25, which are fair. Some regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	129	14	540	80	57	245	104	73	41	22	47	9.7
2	76	18	608	75	56	334	95	118	36	19	50	11
3	57	18	359	71	65	453	86	244	36	17	79	17
4	48	37	264	68	60	426	79	186	37	17	80	33
5	41	80	193	63	55	380	77	168	35	24	55	73
6	40	69	152	62	53	420	86	164	32	23	41	40
7	42	63	128	61	51	410	79	317	28	16	47	25
8	33	54	106	90	50	348	82	348	34	83	52	20
9	28	45	96	250	64	256	109	280	55	392	51	17
10	25	40	86	361	56	228	218	436	49	203	48	20
11	23	37	70	298	52	280	298	395	34	98	105	19
12	21	35	77	228	52	348	348	307	28	64	63	15
13	18	36	84	175	55	338	366	264	24	51	46	13
14	16	38	71	164	60	285	316	232	22	41	43	12
15	16	30	64	145	80	248	268	189	19	39	43	11
16	15	27	59	120	200	252	228	152	19	70	34	9.9
17	14	25	56	107	260	220	189	133	18	50	29	9.7
18	14	24	66	95	232	186	158	120	20	32	24	8.6
19	13	23	89	83	182	168	136	102	64	25	23	8.7
20	13	21	106	78	158	171	122	93	198	21	21	16
21	11	21	80	114	136	189	111	86	72	19	21	19
22	11	20	51	220	120	168	102	79	73	33	20	14
23	12	29	52	161	114	264	93	73	60	84	19	10
24	11	80	48	110	118	264	84	70	44	150	15	8.8
25	11	60	47	96	166	224	79	64	39	400	14	8.2
26	13	45	90	86	475	200	73	60	34	332	13	7.6
27	21	44	113	76	380	164	70	56	28	204	13	6.8
28	21	47	78	70	248	155	68	52	35	109	13	7.2
29	19	78	86	66		152	66	51	27	80	13	8.0
30	16	62	90	62		125	84	56	24	63	11	7.2
31	14		85	58		111		46		54	10	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	129	11	27.2	0.322	0.37
November	80	14	40.7	.481	.54
December	608	47	132	1.56	1.80
January	361	58	122	1.44	1.66
February	475	50	131	1.55	1.61
March	453	111	258	3.05	3.52
April	366	66	142	1.68	1.87
May	436	46	162	1.91	2.20
June	198	18	42.2	.499	.56
July	400	16	91.5	1.08	1.24
August	105	10	36.9	.436	.50
September	73	6.8	16.2	.191	.21
The year	608	6.8	100	1.18	16.08

Aughwick Creek near Orbisonia, Pa.

Location.- Chain gage, lat. 40°12'35", long. 77°55'30", at highway bridge 600 feet above East Broad Top Railroad bridge, 650 feet above mouth of Three Springs Creek, and 2¼ miles southwest of Orbisonia, Huntingdon County. Zero of gage is 619.04 feet above mean sea level.
Drainage area.- 174 square miles.
Records available.- October 1931 to September 1935 in reports of U. S. Geological Survey; May 1915 to February 1916, January 1930 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Extremes.- Maximum discharge during year, about 6,790 second-feet Dec. 1 (gage height, 12.01 feet); minimum, 14 second-feet Aug. 26 (gage height, 1.83 feet).
1915-16, 1930-35: Maximum discharge, that of Dec. 1, 1934; minimum, 3.8 second-feet Sept. 25-27, 1932 (gage height, 1.70 feet).
Maximum stage known, about 20.5 feet June 1, 1889 (discharge, about 18,400 second-feet).
Remarks.- Records fair. Discharge estimated for periods of ice effect, Dec. 10-15, Jan. 1-8, Jan. 23 to Feb. 15. Some regulation at low stages from operation of gristmills upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	360	39	4,190	155	130	490	182	127	53	32	26	15
2	246	40	2,210	155	140	456	169	205	46	28	28	17
3	132	43	930	150	150	490	157	561	43	27	32	19
4	140	107	636	155	140	456	136	423	45	26	35	70
5	109	260	456	135	130	423	131	345	45	27	29	308
6	109	169	360	130	120	423	157	316	43	25	24	119
7	140	122	310	130	110	391	136	525	39	40	24	67
8	87	98	246	200	100	345	145	525	42	36	28	43
9	70	79	220	630	120	260	273	423	118	215	30	35
10	60	68	200	675	130	246	636	795	90	126	30	37
11	57	62	175	561	120	345	795	715	53	69	76	36
12	50	60	160	407	120	391	675	525	43	38	59	28
13	46	57	145	316	130	490	675	456	39	29	41	24
14	43	53	130	301	150	456	561	391	36	26	32	22
15	40	50	120	246	350	423	490	301	35	23	28	20
16	40	45	113	207	930	407	423	246	30	42	26	19
17	40	46	113	182	964	345	345	220	29	31	24	18
18	39	43	131	220	758	287	287	182	32	26	22	17
19	37	42	145	207	561	260	246	157	33	20	20	18
20	37	42	207	157	456	260	220	143	83	18	19	62
21	40	37	131	246	330	287	194	186	68	17	19	58
22	39	35	109	360	316	273	182	122	66	20	19	30
23	37	48	122	300	301	273	169	113	96	104	18	22
24	40	169	109	250	273	316	140	107	64	41	18	20
25	37	104	87	210	330	273	129	92	46	182	15	18
26	43	75	189	190	1,130	273	113	81	40	181	14	18
27	50	73	360	170	912	246	107	71	39	94	15	18
28	50	79	273	160	598	233	109	68	53	56	17	17
29	50	239	260	150		273	104	62	48	40	20	17
30	43	764	260	140		207	145	64	37	32	18	17
31	40		145	130		182		60		27	16	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	360	37	77.5	0.445	0.51
November	764	35	105	.603	.67
December	4,190	87	427	2.45	2.82
January	675	130	246	1.41	1.63
February	1,130	100	357	2.05	2.14
March	490	182	338	1.94	2.24
April	795	104	274	1.57	1.75
May	795	60	278	1.60	1.84
June	118	29	51.1	.294	.33
July	215	17	54.8	.315	.36
August	76	14	26.5	.152	.18
September	308	15	41.0	.236	.26
The year	4,190	14	189	1.09	14.73

Tuscarora Creek near Port Royal, Pa.

Location.- Water-stage recorder, lat. 40°30'55", long. 77°25'10", at highway bridge 2 miles southwest of Port Royal, Juniata County. Zero of gage is 419.80 feet above mean sea level.
Drainage area.- 214 square miles.
Records available.- October 1918 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; August 1911 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 24 years, 258 second-feet.
Extremes.- Maximum discharge during year, 7,520 second-feet Dec. 1 (gage height, 13.05 feet); minimum, 8.5 second-feet Sept. 22 (gage height, 2.33 feet); minimum daily discharge, 12 second-feet Sept. 22.
1911-35: Maximum discharge, about 11,600 second-feet (revised) Oct. 23, 1929 (gage height, 16.21 feet); minimum, 1 second-foot Aug. 31, Sept. 4-6, 14, 18, 1913, Sept. 21, 1914.
Maximum stage known, 20.5 feet June 1, 1889 (discharge not determined.
Remarks.- Records fair except those estimated for periods of ice effect, Dec. 31 to Jan. 9, Jan. 25 to Feb.17, which are poor. Regulation at low and medium stages from operation of gristmills upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	459	55	5,260	140	105	582	260	166	77	42	51	25
2	264	64	3,650	140	110	800	241	183	67	41	48	32
3	196	60	1,440	180	130	1,040	218	482	67	35	51	35
4	156	265	1,010	165	200	885	193	315	70	34	72	71
5	130	497	710	155	170	755	188	260	69	42	73	247
6	125	235	540	150	150	725	255	266	63	47	39	158
7	140	178	457	150	130	775	204	470	59	31	47	84
8	111	136	369	250	130	740	231	652	70	745	80	49
9	90	111	311	500	140	558	590	470	149	944	88	60
10	81	98	235	910	160	527	1,280	859	127	842	61	41
11	75	90	196	695	150	675	1,760	825	75	206	52	39
12	70	88	166	483	140	860	1,480	601	61	104	73	54
13	67	80	224	349	130	935	1,300	505	70	63	54	42
14	60	77	185	322	130	810	1,010	431	60	40	53	35
15	61	72	156	249	250	700	860	341	52	283	85	24
16	60	66	154	220	600	615	705	276	45	356	56	34
17	54	64	161	202	1,000	536	572	244	51	98	38	48
18	57	63	136	199	835	444	474	215	50	59	26	26
19	55	61	134	145	563	402	397	188	67	43	38	26
20	52	57	294	150	435	431	353	170	69	30	31	38
21	49	56	189	202	297	423	308	158	57	22	27	40
22	56	57	158	276	290	402	280	145	66	48	28	12
23	54	116	152	268	232	406	250	134	88	261	28	18
24	50	293	145	149	234	605	224	130	70	122	26	24
25	51	182	132	135	285	474	199	113	54	84	19	27
26	56	136	160	125	881	435	180	104	52	341	23	15
27	69	121	217	120	1,090	361	170	100	43	189	21	24
28	106	135	138	115	617	341	166	92	42	108	27	21
29	81	338	232	110		410	161	86	41	108	33	16
30	64	1,120	180	105		290	193	92	36	72	36	24
31	56		160	105		257		92		60	36	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	459	49	98.5	0.460	0.53
November	1,120	55	166	.776	.87
December	5,260	132	569	2.66	3.07
January	910	105	241	1.13	1.30
February	1,090	105	342	1.60	1.67
March	1,040	257	587	2.74	3.16
April	1,760	161	490	2.29	2.56
May	859	86	296	1.38	1.59
June	149	36	65.6	.307	.34
July	944	22	177	.827	.95
August	88	19	45.8	.214	.25
September	247	12	46.3	.216	.24
The year	5,260	12	260	1.21	16.53

Cocolamus Creek near Millerstown, Pa.

Location.- Water-stage recorder, lat. 40°33'55", long. 77°07'05", at highway bridge 2.3 miles northeast of Millerstown, Perry County, and 3 miles above confluence with Juniata River. Zero of gage is 425.50 feet above mean sea level.
Drainage area.- 57.2 square miles.
Records available.- October 1931 to September 1935 in reports of U. S.Geological Survey; February 1930 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Extremes.- Maximum discharge during year, 2,620 second-feet Dec. 1 (gage height, 7.59 feet); minimum, 2.7 second-feet Sept. 27 (gage height, 1.02 feet).
1930-35: Maximum discharge, about 3,040 second-feet Aug. 24, 1933 (gage height, 8.20 feet); minimum, 0.7 second-foot Aug. 15, 1932 (gage height, 0.81 foot); minimum daily discharge, 1.3 second-feet Aug. 28, 1932.
Remarks.- Records good except those estimated for periods of ice effect, Dec. 10-15, Jan. 19, 20, Jan. 24 to Feb. 17, which are fair. Some regulation at low stages from operation of gristmill upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	225	24	1,780	61	36	131	63	42	19	11.8	26	4.7
2	147	26	1,280	77	44	208	59	46	14	8.0	22	5.4
3	110	20	371	74	43	244	55	53	17	7.2	22	6.8
4	87	246	225	67	38	165	48	46	20	7.0	19	34
5	74	171	152	58	35	147	46	42	18	6.8	16	35
6	74	125	115	65	33	157	57	53	16	7.2	12	13
7	65	94	96	67	32	186	44	128	14	6.1	16	11
8	53	76	80	106	32	192	60	110	24	136	23	7.8
9	46	67	67	340	34	137	260	94	50	280	24	7.4
10	40	57	61	292	37	132	345	130	27	124	15	7.8
11	38	53	56	194	34	155	250	108	19	67	14	6.8
12	36	50	52	134	33	262	202	94	16	42	13	6.6
13	32	46	50	105	32	233	173	89	14	42	10	6.2
14	28	48	48	98	31	178	140	82	11	26	10	6.0
15	28	37	49	80	40	150	132	70	11	165	9.2	6.6
16	28	33	51	77	70	137	117	59	8.6	218	8.8	4.8
17	22	33	53	72	230	130	101	55	9.3	74	8.5	6.2
18	26	30	46	69	164	105	85	50	11	46	8.0	6.1
19	27	31	79	66	115	101	76	42	42	32	6.8	4.5
20	22	28	108	63	96	96	70	42	24	114	7.0	12
21	23	26	67	61	82	145	63	37	16	180	7.2	9.7
22	28	28	63	74	72	115	61	37	25	98	7.4	7.1
23	24	182	59	63	70	113	53	34	20	101	6.9	5.2
24	23	349	55	55	80	101	51	34	17	61	6.0	6.0
25	20	183	51	51	80	92	46	29	12	144	5.5	5.0
26	34	125	78	47	290	85	42	26	11	147	4.5	4.7
27	32	103	85	44	219	76	42	26	8.8	78	6.0	3.3
28	54	108	92	42	134	86	42	22	9.0	53	5.8	6.4
29	30	161	65	40		82	44	23	8.2	48	5.2	6.4
30	24	408	68	38		67	62	22	8.4	36	5.3	4.2
31	19		75	37		59		21		31	5.5	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	225	19	49.0	0.857	0.99
November	408	20	98.9	1.73	1.93
December	1,780	46	180	3.15	3.63
January	340	37	87.6	1.53	1.76
February	290	31	79.9	1.40	1.46
March	262	59	138	2.41	2.78
April	345	42	96.3	1.68	1.87
May	130	21	56.3	.984	1.13
June	50	8.2	17.3	.302	.34
July	280	6.1	77.3	1.35	1.56
August	26	4.5	11.5	.201	.23
September	36	3.3	8.56	.150	.17
The year	1,780	3.3	75.2	1.31	17.85

Sherman Creek at Shermandale, Pa.

Location.- Water-stage recorder, lat. 40°19'25", long. 77°10'05", at highway bridge at Shermandale, Perry County, 1¼ miles above mouth of Fishing Run. Zero of gage is 421.90 feet above mean sea level.
Drainage area.- 200 square miles.
Records available.- October 1931 to September 1935 in reports of U. S. Geological Survey; September 1929 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Extremes.- Maximum discharge during year, about 11,100 second-feet Dec. 1 (gage height, 12.28 feet); minimum, 10 second-feet Aug. 26 (gage height, 0.87 foot); minimum daily discharge, 19 second-feet Sept. 1.
1929-35: Maximum gage height, 14.05 feet Aug. 24, 1933 (discharge not determined); minimum discharge, 3.9 second-feet Dec. 1, 1930 (gage height, 0.72 foot); minimum daily discharge, 10 second-feet Dec. 24, 25, 1930.
Maximum stage known, 20.34 feet July 22, 1927 (discharge not determined).
Remarks.- Records good except those for high stages and those estimated for periods of ice effect, Jan. 2-7, Jan. 25 to Feb.14, which are fair. Some regulation from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	427	86	8,330	169	120	598	312	225	97	44	61	19
2	308	87	3,680	170	130	719	300	251	87	41	60	37
3	258	79	1,680	220	150	814	277	383	84	37	67	54
4	222	776	1,240	200	230	736	254	285	89	35	63	221
5	194	644	940	190	200	670	243	262	88	37	64	372
6	200	354	748	180	170	736	292	262	78	38	48	155
7	218	277	634	180	160	772	254	365	75	32	57	96
8	158	225	528	290	180	754	287	396	97	933	124	64
9	144	187	450	580	210	582	1,600	312	203	3,170	138	53
10	117	164	390	634	230	555	1,150	503	154	1,190	88	65
11	118	147	333	528	210	724	1,270	485	99	534	77	58
12	116	139	295	390	170	910	1,440	390	80	329	75	46
13	104	130	325	316	160	970	1,300	372	101	250	57	42
14	100	122	269	308	160	850	1,030	342	73	200	53	44
15	94	111	232	254	454	754	850	300	64	171	53	33
16	93	106	222	245	827	682	736	262	59	167	48	42
17	91	103	232	235	970	604	604	239	55	139	43	37
18	88	98	200	235	782	500	516	222	59	124	36	37
19	88	96	232	240	577	456	445	200	75	105	40	36
20	83	91	372	183	472	450	395	187	99	97	39	56
21	77	92	250	236	350	450	364	177	84	87	39	41
22	89	98	222	265	350	405	337	167	116	125	35	39
23	86	244	211	247	304	435	304	158	98	148	38	34
24	82	613	197	162	288	489	281	155	77	142	35	31
25	75	354	187	150	331	395	258	139	68	162	30	39
26	93	281	240	140	1,120	377	236	130	69	181	34	31
27	103	269	260	135	1,070	342	225	124	51	111	34	25
28	135	311	209	130	659	374	218	118	48	83	33	34
29	107	810	239	125		445	218	107	46	88	31	24
30	86	2,620	225	120		329	285	115	47	73	34	33
31	80		200	120		312		115		63	31	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	427	75	137	0.685	0.79
November	2,620	79	324	1.62	1.81
December	8,330	187	767	3.84	4.43
January	634	120	244	1.22	1.41
February	1,120	120	394	1.97	2.05
March	970	312	587	2.94	3.39
April	1,600	218	543	2.72	3.04
May	503	107	250	1.25	1.44
June	203	46	84.0	.420	.47
July	3,170	32	288	1.44	1.66
August	138	30	53.7	.268	.31
September	372	19	63.3	.316	.35
The year	8,330	19	311	1.56	21.15

Conodoguinet Creek near Hogestown, Pa.

Location.- Water-stage recorder, lat. 40°15'10", long. 77°01'15", 1,000 feet above highway bridge, three-eighths of a mile below mouth of Hogestown Run, and 1 mile northeast of Hogestown, Cumberland County. Zero of gage is 350.25 feet above mean sea level.
Drainage area.- 470 square miles.
Records available.- October 1931 to September 1935 in reports of U. S. Geological Survey; September 1929 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Extremes.- Maximum discharge during year, 13,100 second-feet Dec. 2 (gage height 11.32 feet); minimum, 83 second-feet July 4, 7 (gage height, 1.02 feet); minimum daily discharge, 96 second-feet July 4.
1929-35: Maximum discharge, that of Dec. 2, 1934; minimum, 24 second-feet Dec. 16, 1930.
Remarks.- Records good except those estimated for periods of recorder failure, Nov. 11-14, May 21-23, and for periods of ice effect, Jan. 2-7, Jan. 24 to Feb. 14, which are fair. Some regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,940	206	9,380	396	340	1,120	550	443	222	148	188	104
2	1,150	202	11,100	390	360	1,120	534	402	201	176	188	101
3	840	208	4,270	480	430	1,080	503	567	188	143	191	130
4	659	317	2,360	450	550	996	468	595	211	96	185	206
5	550	1,530	1,690	350	500	904	444	516	201	110	175	760
6	514	808	1,260	360	450	885	458	477	188	135	166	696
7	545	555	1,080	380	420	852	458	501	191	122	160	457
8	454	429	937	454	440	878	478	579	204	461	198	328
9	387	351	808	830	460	778	1,350	491	254	2,030	225	263
10	342	321	712	1,180	500	712	2,080	511	306	1,610	229	278
11	317	300	620	1,120	420	872	1,570	761	266	792	211	241
12	296	285	521	878	370	1,150	1,370	606	194	482	194	206
13	269	270	592	694	350	1,650	1,530	542	188	351	188	178
14	265	260	539	631	350	1,490	1,290	516	181	294	166	157
15	250	243	468	529	673	1,330	1,100	477	172	257	198	145
16	254	218	454	498	1,740	1,120	990	429	160	502	175	122
17	236	199	473	478	2,360	1,020	854	397	148	330	154	140
18	228	205	449	454	2,020	852	731	361	163	238	143	120
19	234	180	458	415	1,370	754	645	348	157	204	127	122
20	222	199	560	382	1,120	736	590	327	181	185	138	208
21	204	184	555	410	878	712	547	320	208	178	125	178
22	212	191	473	493	778	760	521	310	254	191	120	151
23	222	247	454	566	730	718	491	300	222	300	120	117
24	218	620	429	510	648	911	453	294	191	348	117	127
25	210	592	410	480	683	784	429	278	188	410	113	110
26	212	444	468	460	1,420	718	402	259	166	1,260	97	106
27	222	382	642	440	2,300	654	379	251	157	502	116	106
28	235	420	560	420	1,370	626	379	236	157	340	125	110
29	229	583	571	400		742	357	233	219	282	113	106
30	228	2,710	545	380		631	388	222	163	233	106	97
31	204		454	360		560		215		201	108	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,940	204	398	0.847	0.98
November	2,710	180	455	.968	1.08
December	11,100	410	1,429	3.04	3.50
January	1,180	350	525	1.12	1.29
February	2,360	340	858	1.83	1.91
March	1,650	560	907	1.93	2.22
April	2,080	357	745	1.59	1.77
May	761	215	412	.877	1.01
June	306	148	197	.419	.47
July	2,030	96	416	.885	1.02
August	229	97	157	.334	.39
September	760	97	206	.438	.49
The year	11,100	96	558	1.19	16.13

Swatara Creek at Harper Tavern, Pa.

Location.- Water-stage recorder, lat. 40°24'10", long. 76°34'35", at highway bridge at Harper Tavern, Lebanon County, 6 miles northwest of Annville, and 8½ miles below mouth of Little Swatara Creek. Zero of gage is 355.53 feet above mean sea level.
Drainage area.- 333 square miles.
Records available.- October 1919 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; December 1918 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 16 years (1919-35), 527 second-feet.
Extremes.- Maximum discharge during year, 10,400 second-feet Dec. 2 (gage height, 11.54 feet); minimum, 41 second-feet at times during August and September (gage height, 0.13 feet).
1918-35: Maximum discharge, 25,300 second-feet Aug. 24, 1933 (gage height, 17.53 feet); minimum, 8 second-feet Sept. 24, 25, 1932 (gage height, 0.03 foot).
Remarks.- Records good except those estimated for periods of ice effect, Jan. 16-20, Jan. 24 to Feb. 15, and for periods of recorder failure, Apr. 10-12, 25, 26, July 6-9, Aug. 11-17, Sept. 2-7, which are fair. Some regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,910	214	6,130	355	270	824	523	405	123	80	106	45
2	1,290	280	8,090	316	270	842	506	345	109	70	208	55
3	963	193	3,000	412	320	860	462	462	103	66	254	120
4	785	1,210	2,260	340	340	788	420	380	115	61	174	400
5	636	1,420	1,600	269	280	728	415	340	132	63	190	500
6	1,140	1,500	1,260	360	250	794	638	345	182	60	203	250
7	964	1,230	1,050	368	230	866	496	440	170	60	141	135
8	636	963	876	850	220	890	875	446	145	150	161	101
9	520	774	753	1,080	280	704	2,570	355	284	1,900	148	85
10	452	641	647	1,230	350	672	2,220	350	296	2,000	115	85
11	411	572	594	992	330	848	1,940	365	165	950	110	83
12	365	499	546	747	310	1,300	1,640	325	129	606	100	70
13	312	447	562	615	290	1,430	1,400	311	252	457	95	63
14	289	436	462	551	400	1,190	1,160	316	123	360	120	58
15	272	365	416	421	800	1,160	1,040	306	101	295	120	66
16	251	336	406	430	1,580	1,160	1,040	269	90	899	90	54
17	234	317	406	390	1,940	1,040	878	256	85	446	80	52
18	227	294	375	360	1,380	884	758	239	90	287	68	47
19	208	280	550	340	980	818	666	223	101	227	58	52
20	187	285	1,070	320	842	848	606	211	135	192	66	66
21	180	272	556	416	644	1,070	556	207	129	217	68	90
22	190	315	462	551	638	950	523	196	311	185	78	63
23	187	409	436	509	578	782	490	189	385	174	75	52
24	164	1,000	390	360	518	770	446	185	234	157	63	47
25	153	647	365	380	545	682	410	174	161	164	54	43
26	174	535	608	360	1,820	628	390	164	129	247	52	43
27	222	520	620	340	1,710	572	360	157	106	164	47	43
28	410	594	499	320	950	600	355	145	109	129	61	47
29	285	705	483	300		806	340	138	96	115	56	43
30	200	1,400	457	290		578	425	141	85	101	49	43
31	174		355	280		523		135		93	56	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,910	153	464	1.39	1.60
November	1,500	193	622	1.87	2.09
December	8,090	355	1,170	3.51	4.05
January	1,230	269	479	1.44	1.66
February	1,940	220	681	2.05	2.14
March	1,430	523	858	2.58	2.97
April	2,570	340	818	2.46	2.74
May	462	135	275	.826	.95
June	385	85	156	.468	.52
July	2,000	60	354	1.06	1.22
August	254	47	105	.315	.36
September	500	43	96.7	.290	.32
The year	8,090	43	506	1.52	20.62

West Conewago Creek near Manchester, Pa.

Location.- Water-stage recorder, lat. 40°04'55", long. 76°43'10", 500 feet above Manchester-York Haven highway bridge and 1½ miles north of Manchester, York County.
Drainage area.- 510 square miles.
Records available.- October 1928 to September 1935.
Extremes.- Maximum discharge during year, 20,700 second-feet Dec. 1 (gage height, 15.86 feet); minimum, 8.0 second-feet Sept. 1 (gage height, 1.29 feet); minimum daily discharge, 12 second-feet Sept. 1.
1928-35: Maximum discharge, 47,600 second-feet Aug. 24, 1933 (gage height, 24.14 feet); minimum, 2 second-feet Aug. 7, 8, Oct. 20, 1930.
Remarks.- Records fair except those for estimated periods and those subsequent to Aug. 17, which are poor. Discharge estimated for period of ice effect, Jan. 26 to Feb. 6, Feb. 16, and for period of missing gage-height record, Apr. 29 to May 6. Slight regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,740	194	8,890	311	300	845	485	660	125	53	47	12
2	1,460	219	9,840	292	310	872	531	600	127	41	43	26
3	1,070	226	1,970	440	350	845	470	880	112	43	43	28
4	872	374	1,680	363	410	724	407	620	115	50	40	33
5	697	1,110	1,270	345	370	648	379	500	115	59	37	477
6	948	509	930	338	340	653	530	550	122	77	32	353
7	1,100	541	845	398	321	626	610	758	117	46	27	192
8	659	349	762	751	304	610	749	930	125	48	34	134
9	514	281	658	1,020	374	600	8,050	537	155	74	34	89
10	454	243	573	1,400	455	506	3,060	446	218	172	33	68
11	411	226	470	1,200	691	743	1,500	511	201	177	37	57
12	381	213	374	790	691	1,580	1,300	407	148	119	45	47
13	345	213	440	584	573	2,640	1,360	352	115	82	35	39
14	310	191	427	531	537	1,960	1,080	352	98	62	47	35
15	292	182	400	431	1,230	1,640	900	329	90	48	47	33
16	281	170	388	451	3,500	1,170	845	283	82	45	53	32
17	267	164	393	407	5,400	960	718	260	69	53	137	19
18	253	161	388	475	4,380	790	610	237	56	104	99	26
19	246	156	458	457	2,080	691	552	219	102	80	55	26
20	236	164	1,310	543	1,770	680	516	196	108	85	31	26
21	216	159	738	460	1,200	735	465	192	96	62	37	24
22	223	159	531	661	1,020	900	455	196	96	43	33	21
23	232	176	501	900	930	903	421	199	98	40	29	30
24	213	618	450	536	900	1,020	383	189	82	86	28	22
25	200	570	407	531	1,330	724	356	176	73	76	22	23
26	207	318	507	480	2,190	664	338	164	82	165	25	24
27	259	277	1,100	430	1,810	600	316	136	71	160	18	22
28	253	314	572	390	990	547	304	138	63	105	16	19
29	253	402	475	350		845	340	141	60	63	18	18
30	223	1,110	511	320		621	680	127	55	45	20	20
31	194		426	310		496		122		57	15	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,740	194	548	1.07	1.23
November	1,110	156	333	.653	.73
December	9,840	374	1,248	2.45	2.82
January	1,400	292	545	1.07	1.23
February	5,400	304	1,241	2.43	2.53
March	2,640	496	897	1.76	2.03
April	8,050	304	957	1.88	2.10
May	930	122	368	.722	.83
June	218	55	106	.208	.23
July	177	40	78.1	.153	.18
August	137	15	39.3	.077	.09
September	477	12	65.8	.129	.14
The year	9,840	12	532	1.04	14.14

Codorus Creek at Spring Grove, Pa.

Location.- Water-stage recorder, lat. 39°52'10", long. 76°51'55", at highway bridge at Spring Grove, York County. Zero of gage is 436.22 feet above mean sea level.
Drainage area.- 74.3 square miles.
Records available.- March 1932 to September 1935 in reports of U. S. Geological Survey; April 1929 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Extremes.- Maximum discharge during year, 1,110 second-feet Dec. 1 (gage height, 5.36 feet); minimum, 6.3 second-feet Sept. 29 (gage height, 0.41 foot); minimum daily discharge, 7.6 second-feet Aug. 18, 25.
1929-35: Maximum discharge, about 11,200 second-feet Aug. 23, 1933 (gage height, 11.84 feet); minimum, probably less than 2.2 second-feet in September 1932; minimum daily discharge recorded, 7.1 second-feet Oct. 5, 1930.
Remarks.- Records fair except those estimated for periods of recorder failure, Oct. 30 to Nov. 5, Feb. 3-10, June 28 to July 8, which are poor. Regulation at low stages from operation of paper mill above station.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	242	54	587	72	58	118	96	76	33	35	14	8.0
2	176	50	243	66	73	119	92	104	31	20	12	24
3	146	46	154	68	82	111	83	124	31	17	11	30
4	126	78	156	67	78	101	81	106	34	15	11	131
5	113	62	119	52	72	102	83	90	36	18	12	67
6	226	60	98	59	67	100	116	98	46	19	11	37
7	133	53	91	70	66	97	89	179	33	18	13	22
8	106	48	82	80	70	97	234	119	33	27	15	20
9	96	45	76	103	75	87	472	101	60	24	14	20
10	87	43	70	104	95	90	302	100	38	18	11	18
11	84	41	63	85	113	109	223	91	32	16	10	15
12	77	41	60	74	93	157	217	81	31	14	12	14
13	71	39	62	71	89	199	183	84	29	13	11	14
14	67	39	60	71	86	183	158	80	26	12	11	13
15	64	38	57	61	342	168	146	71	24	16	11	14
16	61	38	59	61	362	152	133	65	24	28	12	14
17	60	38	62	73	433	136	122	62	24	16	11	12
18	60	36	58	66	283	119	113	60	27	14	7.6	12
19	56	37	139	60	227	116	107	56	31	13	11	11
20	53	36	106	66	189	114	101	55	32	11	11	12
21	53	36	71	85	155	149	98	64	26	12	13	11
22	53	38	70	153	148	116	96	57	31	15	12	10
23	50	52	66	103	140	123	90	53	24	16	14	12
24	49	94	63	89	133	113	86	50	24	14	13	9.9
25	50	48	61	88	130	110	82	47	24	24	7.6	11
26	59	43	92	89	168	106	78	45	20	17	10	11
27	58	45	72	75	140	97	77	43	20	15	11	11
28	57	49	61	71	120	108	74	38	20	14	14	8.6
29	49	66	74	72		104	85	37	60	14	14	8.4
30	47	101	69	64		91	130	38	70	12	15	10
31	46		55	62		89		36		18	14	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	242	46	86.3	1.16	1.34
November	101	36	49.8	.670	.75
December	587	55	102	1.37	1.58
January	153	52	76.8	1.03	1.19
February	433	58	146	1.97	2.05
March	199	87	119	1.60	1.84
April	472	74	135	1.82	2.03
May	179	36	74.5	1.00	1.15
June	70	20	32.5	.437	.49
July	35	11	17.3	.233	.27
August	15	7.6	11.9	.160	.18
September	131	8.0	20.4	.275	.31
The year	587	7.6	72.1	.970	13.18

South Branch of Codorus Creek near York, Pa.

Location.- Water-stage recorder, lat. 39°55'10", long. 76°45'00", just below dam of pumping station of York Water Co., half a mile above confluence with Codorus Creek, and 3 miles southwest of York, York County. Zero of gage is 373.03 feet above mean sea level.
Drainage area.- 117 square miles.
Records available.- October 1931 to September 1935 in reports of U. S. Geological Survey; May 1925 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Extremes.- Maximum discharge during year, 780 second-feet Dec. 1 (gage height, 4.73 feet); minimum, 0.8 second-foot Aug. 28 (gage height, 0.33 foot); minimum daily discharge, 8.6 second-feet Aug. 28.
1925-35: Maximum discharge, about 19,300 second-feet Aug. 23, 1933 (gage height, 17.97 feet); minimum, that of Aug. 28, 1935; minimum daily discharge, that of Aug. 28, 1935.
Remarks.- Records fair. Discharge estimated for period of ice effect, Jan. 29, 30. Regulation from pumping plant upstream. Municipal water supply for York diverted above station not included in records except in part of monthly table. Record of monthly diversion furnished by York Water Co.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	318	96	491	139	107	189	136	117	61	60	31	13
2	246	90	332	128	121	191	134	144	59	37	23	34
3	213	83	219	122	135	182	126	172	57	34	24	49
4	191	150	219	121	128	161	132	166	61	30	24	296
5	173	113	168	98	115	163	125	128	67	36	22	191
6	297	108	149	109	108	163	190	145	84	37	14	84
7	209	98	141	121	107	155	135	372	61	34	23	57
8	175	85	131	131	115	155	317	242	64	48	28	47
9	161	80	125	147	119	141	617	85	116	69	24	44
10	152	79	119	165	158	144	476	101	75	48	25	41
11	146	81	112	140	147	170	372	138	62	39	21	38
12	136	77	106	124	131	213	350	128	58	32	19	32
13	128	75	112	119	125	267	308	131	51	32	15	34
14	125	74	108	122	140	246	276	126	47	31	29	37
15	119	70	103	107	439	246	252	114	51	28	18	35
16	119	71	108	109	396	230	230	105	48	42	21	33
17	108	71	108	124	476	219	209	101	44	30	18	28
18	110	71	99	121	387	191	193	97	62	29	15	29
19	106	71	233	109	328	180	184	93	130	22	14	28
20	101	71	198	117	282	182	173	89	91	23	11	29
21	105	70	125	140	236	209	170	98	57	23	12	28
22	104	74	125	230	228	180	161	91	70	39	14	29
23	97	79	118	190	217	191	147	86	53	43	14	27
24	94	146	113	150	206	175	141	86	49	32	14	22
25	93	85	112	172	202	161	135	81	48	70	12	24
26	109	78	157	155	242	160	129	79	42	47	13	21
27	108	77	126	135	225	147	125	71	40	28	10	25
28	110	89	108	121	191	156	126	67	39	29	8.6	26
29	93	96	128	115		160	137	64	107	26	12	32
30	86	162	122	110		144	196	70	131	22	12	24
31	85		104	112		140		67		34	15	

Month	Observed			Diversion	Corrected for diversion		
	Maximum	Minimum	Mean	(Mean)	Mean	Per square mile	Run-off in inches
October	318	85	142	12.4	154	1.32	1.52
November	162	70	89.0	12.5	102	.872	.97
December	491	99	152	12.3	164	1.40	1.61
January	230	98	132	12.4	144	1.23	1.42
February	476	107	208	12.0	220	1.88	1.96
March	267	140	181	11.4	192	1.64	1.89
April	617	125	213	11.7	225	1.92	2.14
May	372	64	118	12.2	130	1.11	1.28
June	131	39	66.2	12.4	78.6	.672	.75
July	70	22	36.6	14.0	50.6	.432	.50
August	31	8.6	17.9	13.9	31.8	.272	.31
September	296	13	47.9	12.4	60.3	.515	.57
The year	617	8.6	116	12.5	128	1.09	14.92

Conestoga Creek at Lancaster, Pa.

Location.- Water-stage recorder, lat. 40°03'00", long. 76°16'40", at Pennsylvania Railroad bridge 500 feet below diversion dam of city waterworks and three quarters of a mile east of Lancaster, Lancaster County. Zero of gage is 244.74 feet (revised) above mean sea level.
Drainage area.- 322 square miles.
Records available.- September 1928 to September 1935.
Extremes.- Maximum discharge during year, 2,900 second-feet Dec. 1 (gage height, 6.41 feet); minimum, 18 second-feet Sept. 30 (gage height, 1.28 feet); minimum daily discharge, 47 second-feet Sept. 29.
1928-35: Maximum discharge, about 22,800 second-feet Aug. 24, 1933 (gage height, 17.52 feet); no flow over dam Aug. 11, 1930; minimum daily discharge observed, 9 second-feet Oct. 14, 1931, Sept. 15, 23, 1932.
Remarks.- Records excellent except those below 100 second-feet and those estimated for period of ice effect, Jan. 26 to Feb. 3, which are good. Regulation from operation of waterworks. Water supply for city of Lancaster diverted above gage not included in records except in part of monthly table. Record of diversion furnished by city of Lancaster.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,760	296	2,160	379	250	710	374	410	179	140	122	79
2	1,190	378	1,530	423	270	752	384	374	165	132	134	104
3	950	290	890	399	290	758	354	520	174	123	153	131
4	824	290	908	373	342	642	323	379	183	122	115	254
5	728	497	746	297	312	598	323	350	211	116	133	733
6	1,120	941	636	312	280	598	406	350	196	116	129	247
7	1,020	776	598	367	256	576	342	435	186	112	118	169
8	704	450	526	509	300	598	629	505	170	145	114	122
9	614	379	480	523	285	505	1,070	358	249	1,240	124	135
10	564	340	450	773	319	480	1,360	334	254	665	108	138
11	532	330	420	598	334	581	1,020	337	188	275	92	115
12	500	326	377	465	308	938	920	304	171	208	142	115
13	452	304	415	406	290	1,080	902	304	160	172	122	114
14	425	297	392	420	320	854	788	300	154	160	139	103
15	430	280	370	346	1,240	818	746	286	146	163	133	84
16	402	276	362	366	1,260	734	710	267	138	187	105	100
17	379	275	397	370	1,760	669	642	257	151	200	106	107
18	374	263	366	379	1,470	598	581	243	147	157	92	103
19	358	267	523	330	1,080	576	537	233	161	134	103	100
20	338	258	1,120	338	950	586	506	233	187	228	108	90
21	326	248	497	463	770	614	480	233	175	173	120	99
22	393	248	410	748	734	598	475	226	156	166	113	69
23	362	256	402	590	680	532	445	216	150	168	116	84
24	319	399	370	339	630	537	420	215	156	136	110	93
25	304	328	350	429	687	470	385	214	142	162	83	79
26	308	270	500	360	1,340	445	366	203	144	202	98	62
27	326	248	577	320	1,080	415	358	203	142	163	98	60
28	383	251	377	300	746	410	350	196	130	115	105	64
29	346	267	397	280		515	348	188	127	142	95	47
30	293	1,020	420	270		402	461	188	169	136	88	58
31	285		330	260		362		190		119	84	

Month	Observed			Diversion	Corrected for diversion		
	Maximum	Minimum	Mean	(Mean)	Mean	Per square mile	Run-off in inches
October	1,760	285	558	10.4	568	1.76	2.03
November	1,020	248	368	10.6	379	1.18	1.32
December	2,160	330	590	10.2	600	1.86	2.14
January	773	260	411	10.2	421	1.31	1.51
February	1,760	250	664	10.7	675	2.10	2.19
March	1,080	362	611	10.4	621	1.93	2.22
April	1,360	323	567	10.6	578	1.80	2.01
May	520	188	292	10.9	303	.941	1.08
June	254	127	169	11.8	181	.562	.63
July	1,240	112	209	11.7	221	.686	.79
August	153	83	113	11.8	125	.388	.45
September	733	47	129	11.1	140	.435	.49
The year	2,160	47	389	10.9	400	1.24	16.86

Muddy Creek at Castle Fin, Pa.

Location.- Water-stage recorder, lat. 39°46'25", long. 76°19'00", 1 mile downstream from Castle Fin, York County, and 2 3/4 miles upstream from mouth of creek.
Drainage area.- 133 square miles.
Records available.- October 1928 to September 1935.
Extremes.- Maximum discharge during year, 3,620 second-feet July 8 (gage height, 7.38 feet); minimum, 18 second-feet Aug. 6 (gage height, 1.17 feet); minimum daily discharge, 72 second-feet Aug. 20.
1928-35: Maximum discharge, about 16,600 second-feet Aug. 23, 1933 (gage height, 21.11 feet); minimum gage height, 0.90 foot Nov. 29, 1930 (discharge not determined); minimum daily discharge observed, 20 second-feet July 29, 1931.
Remarks.- Records fair. Discharge estimated for periods of ice effect, Dec. 10-12, 28, Jan. 24 to Feb. 8, Feb. 12, 13. Regulation from operation of hydroelectric plant upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	198	100	832	190	135	239	197	203	135	132	116	78
2	168	109	516	182	145	245	200	230	128	116	96	80
3	156	107	308	193	165	241	188	238	127	115	103	151
4	147	167	288	160	155	221	182	224	142	105	120	644
5	139	145	227	162	140	224	185	202	137	110	84	427
6	218	169	199	144	135	224	283	208	168	110	78	210
7	174	140	192	142	130	212	208	317	152	105	106	145
8	142	119	175	154	135	221	736	248	142	744	115	116
9	131	117	163	166	155	203	1,250	221	204	940	85	106
10	126	105	150	180	197	200	711	213	170	237	81	115
11	125	94	145	163	171	233	520	221	148	157	88	104
12	125	118	140	148	160	299	466	200	139	142	102	100
13	116	98	157	139	150	366	418	212	121	134	159	98
14	102	94	171	136	161	318	366	209	128	122	156	104
15	112	104	158	123	393	298	343	197	117	118	92	89
16	115	96	130	130	441	280	326	185	120	124	102	80
17	104	96	134	139	594	257	304	182	112	114	87	96
18	105	94	133	148	477	239	284	174	116	117	89	78
19	112	114	297	132	390	227	273	160	329	99	80	98
20	91	94	239	138	340	233	258	166	188	111	72	92
21	112	96	166	188	290	248	253	179	153	89	124	82
22	105	98	157	340	276	233	249	173	176	141	124	87
23	101	110	151	233	262	236	236	164	146	130	96	78
24	101	147	139	190	248	228	227	167	129	116	93	80
25	103	127	133	200	248	216	221	164	119	162	73	82
26	97	104	178	180	298	221	212	153	112	127	86	82
27	110	108	154	160	284	209	209	158	117	107	74	82
28	112	112	145	150	247	212	207	142	117	111	88	86
29	106	132	157	140		221	205	142	112	94	84	77
30	104	564	146	135		200	242	149	353	102	89	78
31	106		145	135		190		147		88	76	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	218	91	125	0.940	1.08
November	564	94	129	.970	1.08
December	832	130	207	1.56	1.80
January	340	123	165	1.24	1.43
February	594	130	247	1.86	1.94
March	366	190	239	1.80	2.08
April	1,250	182	332	2.50	2.79
May	317	142	192	1.44	1.66
June	353	112	152	1.14	1.27
July	940	88	168	1.26	1.45
August	159	72	97.4	.732	.84
September	644	77	127	.955	1.07
The year	1,250	72	181	1.36	18.49

POTOMAC RIVER BASIN

Evitts Creek near Bedford Valley, Pa.

Location.- Water-stage recorder, lat. 39°47'25", long. 78°38'50", 2 miles upstream from Thomas W. Koon Dam, half a mile upstream from backwater from the dam, and 3 miles south of Bedford Valley post office, Bedford County.
Drainage area.- 30.2 square miles.
Records available.- September 1932 to September 1935.
Extremes.- Maximum discharge during year, 381 second-feet Feb. 15 (gage height, 2.79 feet); minimum, 3.2 second-feet July 20 (gage height, 1.12 feet).
1932-35: Maximum discharge, 905 second-feet (revised) Mar. 14, 1933 (gage height 3.55 feet); minimum, 1.2 second-feet July 27, 1934 (gage height, 0.96 foot).
Remarks.- Records good except those above 500 second-feet and those estimated for period of ice effect, Jan. 28 to Feb. 8, which are fair.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	4.8	73	27	20	59	35	20	13.5	14	4.6	4.8
2	11	5.3	56	27	20	61	35	143	12.5	8.8	74	12
3	10	4.6	46	25	20	66	32	140	12.5	7.8	35	12.5
4	8.5	14	41	21	20	61	30	94	16	7.2	16.5	84
5	8.1	12.5	34	16.5	15	59	29	76	13	7.5	12	41
6	11.5	9.2	29	19.5	13	58	46	73	12	7.5	9.8	19.5
7	9.8	7.5	25	19	13	59	33	124	11	7.5	20	14.5
8	7.8	7.2	23	29	13	53	37	87	16.5	6.9	14	12
9	6.3	6.3	19.5	130	24	45	55	73	23	11	12	12
10	6.1	6.1	17.5	87	37	44	103	189	13.5	10.5	51	11.5
11	5.6	7.5	16.5	62	30	59	111	111	11	6.9	43	9.8
12	5.3	7.5	17.5	49	25	73	127	91	10.5	5.8	21	9.2
13	4.6	7.2	17.5	44	26	71	134	83	9.8	6.1	16.5	8.1
14	5.0	6.6	14.5	43	31	64	106	73	8.8	5.3	15	7.8
15	4.6	6.3	12	39	126	56	87	59	8.5	4.8	14	7.2
16	4.6	5.8	12.5	35	124	59	73	51	8.1	4.8	12	6.9
17	4.4	5.8	13.5	44	186	52	62	45	8.5	4.2	10.5	6.6
18	4.4	5.6	12	48	103	49	55	41	8.8	4.0	9.5	6.3
19	4.6	5.8	12.5	34	80	46	49	37	16	3.6	8.8	6.6
20	4.2	6.3	16.5	41	69	48	45	34	19.5	8.8	8.5	13
21	4.2	5.8	13	59	56	62	41	37	12	38	8.8	7.5
22	4.2	6.1	12	106	52	49	38	31	19	25	8.1	6.1
23	4.0	36	12	76	48	49	34	28	11	11.5	6.9	5.8
24	4.0	32	12.5	66	48	55	32	25	10	7.5	6.3	5.6
25	3.8	17.5	12	66	62	49	28	23	9.8	7.8	5.3	5.0
26	6.1	15	70	58	116	48	26	21	8.1	6.9	5.6	5.0
27	6.3	14.5	39	43	76	43	25	19	7.5	6.1	8.5	4.8
28	7.5	14.5	26	35	64	46	25	16.5	7.2	5.6	7.5	4.8
29	5.6	49	31	30		45	23	16	8.1	4.8	5.8	5.0
30	5.0	49	27	25		39	22	16	25	4.6	5.6	5.0
31	4.6		22	20		37		15		4.0	5.3	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	15	3.8	6.35	0.210	0.24
November	49	4.6	12.7	.421	.47
December	73	12	25.3	.838	.97
January	130	16.5	45.9	1.52	1.75
February	186	13	54.2	1.79	1.86
March	73	37	53.7	1.78	2.05
April	134	22	52.6	1.74	1.94
May	189	15	61.0	2.02	2.33
June	25	7.2	12.4	.411	.46
July	38	3.6	8.54	.283	.33
August	74	4.6	15.5	.513	.59
September	84	4.8	12.0	.397	.44
The year	189	3.6	29.9	.990	13.43

Licking Creek near Sylvan, Pa.

Location.- Chain gage, lat. 39°43'20", long.78°03'35", at highway bridge 200 feet (revised) north of Pennsylvania-Maryland State line, 3 miles southwest of Sylvan, Franklin County, and 10 miles (revised) above mouth.
Drainage area.- 158 square miles.
Records available.- June 1930 to September 1935.
Extremes.- Maximum discharge observed during year, about 3,920 second-feet Dec. 1 (gage height, 10.2 feet); minimum, 10 second-feet Aug. 24 (gage height, 0.96 foot).
1930-35: Maximum discharge observed, that of Dec. 1, 1934); minimum, 3.0 second-feet Aug. 8, 1930 (gage height, 0.64 foot).
Remarks.- Records good except those above 2,000 second-feet and those for period of ice effect, Jan. 20, which are fair.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	462	32	3,800	117	148	265	179	94	50	34	17	12
2	232	32	2,200	148	117	355	170	151	46	29	19	16
3	192	30	960	117	165	328	160	564	43	24	24	25
4	140	40	637	156	192	302	134	462	44	22	31	56
5	117	110	430	117	165	265	142	231	44	21	29	564
6	110	96	328	103	156	265	179	289	41	21	22	170
7	124	73	265	110	148	242	151	399	37	20	25	102
8	96	62	232	156	148	231	151	399	42	29	26	62
9	76	48	192	341	132	189	302	328	102	34	29	48
10	66	46	156	430	156	170	875	564	87	60	28	42
11	58	45	140	369	183	242	960	600	54	36	42	36
12	55	43	140	277	174	328	715	430	44	26	37	33
13	47	42	132	212	165	564	675	328	41	26	28	26
14	45	37	140	202	183	529	564	265	36	22	24	23
15	43	36	110	156	289	462	430	231	32	21	21	20
16	42	34	103	156	1,230	399	384	179	31	40	26	19
17	41	31	103	132	1,050	341	314	160	29	50	28	16
18	40	30	87	165	960	254	265	142	28	29	20	16
19	37	30	87	117	675	242	220	117	42	21	16	16
20	36	25	124	120	495	231	189	109	41	18	16	24
21	34	29	96	212	355	254	170	109	36	16	14	36
22	34	30	90	399	314	341	160	102	54	16	14	25
23	32	36	90	430	277	302	142	93	52	16	12	19
24	33	110	89	277	265	430	125	90	43	18	11	16
25	34	96	96	254	265	254	117	78	37	31	11	14
26	36	77	117	232	529	277	102	72	31	69	12	13
27	37	69	254	212	637	231	94	67	28	60	14	13
28	41	70	192	148	430	210	93	60	26	32	14	12
29	38	105	202	156		254	90	56	26	24	13	14
30	38	600	165	156		189	102	54	52	21	15	12
31	30		117	132		189		56		18	14	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	462	30	78.9	0.499	0.58
November	600	25	71.4	.452	.50
December	3,800	87	383	2.42	2.79
January	430	103	204	1.29	1.49
February	1,230	117	357	2.26	2.35
March	564	170	295	1.87	2.16
April	960	90	278	1.76	1.96
May	600	54	222	1.41	1.63
June	102	26	43.3	.274	.31
July	69	16	29.2	.185	.21
August	42	11	21.0	.133	.15
September	564	12	50.0	.316	.35
The year	3,800	11	168	1.06	14.48

OHIO RIVER BASIN

Allegheny River at Larabee, Pa.

Location.- Wire-weight gage, lat. 41°54'05", long. 78°23'05", at bridge on U. S. Highway 6 at Larabee, McKean County, 1 mile (revised) below mouth of Potato Creek and 3¼ miles south of Eldred. Chain gage at same site and datum used prior to Oct. 6, 1934.
Drainage area.- 541 square miles.
Records available.- October 1920 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; June 1915 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 11 years (1920-21, 1925-35), 791 second-feet.
Extremes.- Maximum discharge during year, 4,310 second-feet Jan. 11 (gage height, 12.0 feet, from graph based on gage readings); minimum, 28 second-feet Oct. 18, 19 (gage height, 0.50 foot); minimum daily discharge, 31 second-feet Oct. 18-21.
1915-35: Maximum discharge, about 9,100 second-feet Nov. 18, 1927 (gage height, 17.6 feet, from graph based on gage readings); minimum, about 0.1 second-foot July 25, 1934 (gage height, 0.22 foot); minimum daily discharge, 3.5 second-feet Aug. 8, 1934.
Remarks.- Records poor. Discharge estimated for periods of ice effect, Dec. 7-22, Dec. 27 to Jan. 8, Jan. 25 to Mar. 5. Some regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	254	275	990	330	500	1,000	1,320	493	202	172	383	275
2	132	361	1,460	330	450	950	1,350	317	172	142	275	192
3	94	254	1,140	370	400	950	1,210	632	132	132	286	85
4	80	591	890	340	370	970	1,040	1,320	172	113	264	231
5	64	905	980	320	350	1,100	860	1,380	264	132	202	449
6	59	608	779	320	340	2,020	632	1,620	192	275	172	264
7	69	539	670	380	330	2,100	740	2,100	172	233	192	182
8	56	585	570	1,000	340	2,140	684	3,000	202	369	296	132
9	53	562	470	2,780	350	1,740	740	2,960	172	1,210	383	222
10	46	449	400	3,950	320	1,660	608	2,640	142	1,210	264	306
11	43	471	360	4,190	300	2,060	1,340	3,100	113	830	773	202
12	40	449	340	3,600	290	2,960	2,190	2,910	100	608	712	152
13	37	427	340	2,780	280	2,960	1,860	2,370	89	1,510	449	132
14	34	383	340	1,980	280	2,550	1,620	1,660	81	950	405	132
15	31	306	350	1,280	400	2,240	1,700	1,280	54	712	361	132
16	34	317	360	1,040	1,000	2,420	1,350	890	59	608	286	152
17	32	306	360	1,010	950	2,730	1,240	950	56	449	296	105
18	31	306	340	860	570	2,500	1,240	712	90	361	222	90
19	31	504	350	658	430	2,460	950	712	254	286	192	87
20	31	860	380	684	370	2,100	1,010	493	182	264	162	254
21	31	740	430	991	350	2,100	860	339	224	264	152	202
22	40	712	430	2,310	340	2,460	632	493	752	296	233	172
23	46	658	383	1,660	340	1,900	712	471	860	339	162	162
24	40	3,100	339	1,350	370	2,240	684	427	632	989	222	113
25	42	1,580	306	1,250	500	1,620	493	361	845	2,270	202	102
26	76	1,320	317	1,150	900	1,540	539	317	561	2,340	89	90
27	142	1,240	300	950	1,500	1,350	493	296	608	1,080	181	87
28	142	980	320	800	1,200	1,070	516	275	427	740	442	192
29	162	632	380	720		1,380	383	264	254	800	202	212
30	182	740	450	640		1,320	632	244	202	516	152	172
31	182		380	570		1,280		222		471	142	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	254	31	75.4	0.139	0.16
November	3,100	275	705	1.30	1.45
December	1,460	300	513	.948	1.09
January	4,190	320	1,309	2.42	2.79
February	1,500	280	504	.932	.97
March	2,960	950	1,867	3.45	3.98
April	2,190	383	988	1.83	2.04
May	3,100	222	1,137	2.10	2.42
June	860	54	276	.510	.57
July	2,340	113	667	1.23	1.42
August	773	89	282	.521	.60
September	449	85	176	.325	.36
The year	4,190	31	712	1.32	17.85

Allegheny River at Franklin, Pa.

Location.- Water-stage recorder, lat. 41°23'25", long. 79°49'10", at Eighth Street Bridge, at Franklin, Venango County, 1,000 feet below mouth of French Creek. Zero of gage is 956.26 feet above mean sea level.
Drainage area.- 5,982 square miles.
Records available.- October 1918 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; April 1905 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 17 years (1918-35), 9,495 second-feet.
Extremes.- Maximum discharge during year, 57,000 second-feet Jan. 10; maximum gage height, 13.34 feet Feb. 16 (affected by ice); minimum discharge, 500 second-feet Oct. 20 (gage height, 1.82 feet).
1905-35: Maximum discharge (estimated), 152,000 second-feet Mar. 26, 1913; maximum gage height, 26.0 feet, present datum, Feb. 27, 1917 (affected by ice); minimum discharge, 334 second-feet July 30, 1934 (gage height, 1.63 feet).
Maximum free-flow stage known, 25.0 feet, present datum, Mar. 17, 1865 (discharge not determined).
Remarks.- Records good except those estimated for period of ice effect, Jan. 29 to Feb. 16, which are poor.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,770	2,160	9,750	8,370	4,300	15,900	13,400	6,100	2,630	2,980	5,290	1,850
2	1,390	2,610	15,400	7,100	3,900	14,400	12,400	6,930	2,480	2,610	4,380	1,650
3	1,610	3,500	16,400	5,940	3,500	15,400	11,500	7,450	2,390	2,330	3,950	1,500
4	1,460	3,820	13,400	5,290	3,200	19,000	10,400	11,300	2,840	2,240	3,400	1,520
5	1,210	5,550	10,600	4,820	3,000	21,300	9,150	14,400	4,590	2,200	3,170	1,590
6	1,040	7,100	8,760	4,380	2,900	31,500	8,370	14,900	4,820	2,630	2,980	1,570
7	918	6,930	7,450	6,180	2,800	39,500	7,810	20,000	4,090	2,660	3,150	1,540
8	848	6,260	6,600	16,000	2,900	35,300	7,280	29,700	3,650	2,440	2,860	1,560
9	794	6,430	5,450	38,300	3,000	26,500	6,930	29,100	3,470	3,500	4,090	1,710
10	742	6,760	4,520	55,600	3,000	21,300	6,760	32,100	3,220	5,130	4,250	2,050
11	690	6,100	3,350	48,600	2,700	23,700	7,280	32,700	2,880	5,290	3,680	2,660
12	657	5,450	2,550	37,900	2,600	38,800	9,350	25,500	2,610	5,130	4,380	2,750
13	635	5,130	2,880	28,500	2,500	40,200	12,000	19,600	2,350	4,230	4,980	2,330
14	580	4,980	3,360	23,100	2,600	32,100	12,900	16,400	2,130	3,820	4,090	1,930
15	550	4,670	3,680	18,400	4,500	24,900	12,000	13,400	1,950	4,520	3,470	1,690
16	550	4,380	3,820	13,900	10,000	21,300	10,800	11,300	1,810	3,820	3,200	1,710
17	550	4,380	4,090	12,200	26,100	21,900	10,200	9,350	1,770	3,050	2,880	2,050
18	530	6,100	4,520	11,000	23,700	22,500	9,760	8,180	2,090	2,700	2,480	1,790
19	520	9,970	4,820	9,150	16,400	20,100	9,560	7,100	2,730	2,370	2,280	1,630
20	510	12,000	5,860	9,350	12,600	19,000	8,760	6,260	3,800	2,050	2,090	1,560
21	530	10,600	7,100	14,800	9,760	18,400	7,810	5,770	3,950	1,810	1,870	1,890
22	580	8,950	8,000	33,900	8,180	22,500	7,100	5,290	7,200	1,710	1,870	2,350
23	624	8,760	7,630	34,600	7,450	21,900	6,600	4,820	15,900	1,890	1,930	2,130
24	635	14,600	7,100	26,100	6,430	20,700	5,940	4,380	14,400	4,430	1,850	1,950
25	668	15,400	6,430	17,400	6,930	17,900	5,450	4,090	10,600	15,200	1,750	1,630
26	807	13,000	6,430	13,400	13,200	15,400	4,980	3,820	7,450	21,300	1,610	1,420
27	932	10,800	6,260	9,970	21,900	12,900	4,670	3,520	5,940	13,800	1,570	1,320
28	1,350	8,370	6,100	7,630	20,100	11,500	4,670	3,220	4,820	9,150	1,610	1,410
29	1,750	7,280	7,220	6,500		10,600	4,670	3,050	3,950	9,350	1,870	1,550
30	1,890	7,450	9,560	5,500		10,200	5,130	2,950	3,450	8,560	2,090	1,990
31	1,990		9,350	4,800		11,700		2,820		6,600	2,200	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,990	510	945	0.158	0.18
November	15,400	2,160	7,296	1.22	1.36
December	16,400	2,550	7,046	1.18	1.36
January	55,600	4,380	17,380	2.91	3.36
February	26,100	2,500	8,220	1.37	1.43
March	40,200	10,200	21,880	3.66	4.22
April	13,400	4,670	8,454	1.41	1.57
May	32,700	2,820	11,790	1.97	2.27
June	15,900	1,770	4,532	.758	.85
July	21,300	1,710	5,145	.860	.99
August	5,290	1,570	2,944	.492	.57
September	2,750	1,320	1,809	.302	.34
The year	55,600	510	8,148	1.36	18.50

Allegheny River at Parkers Landing, Pa.

Location.- Water-stage recorder, lat. 41°06'05", long. 79°40'45", at highway bridge at Parkers Landing, Armstrong County, 1.1 miles below mouth of Clarion River. Zero of gage is 845.14 feet above mean sea level.
Drainage area.- 7,671 square miles.
Records available.- October 1932 to September 1935.
Extremes.- Maximum discharge during year, 69,700 second-feet Jan. 10; maximum gage height, 20.60 feet Feb. 27 (affected by ice); minimum discharge, 660 second-feet Oct. 20, 21 (gage height, 0.83 foot).
1932-35: Maximum discharge, that of Jan. 10, 1935; maximum gage height, that of Feb. 27, 1935; minimum discharge, 409 second-feet July 30, 1934 (gage height, 0.67 foot).
Maximum stage known, 29.0 feet in March 1865 (discharge not determined).
Remarks.- Records excellent except those for extremely high stages and those for estimated periods, which are fair. Discharge estimated for period of ice effect, Jan. 29 to Mar. 6, and for periods of missing gage-height record, May 24-26, July 7-14, 17, 20, 21, Aug. 1-4, 19-25, Sept. 12-14. Regulation at low stages from power operations on Clarion River.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,400	2,270	11,200	11,000	5,500	22,000	15,000	6,960	3,630	3,660	7,500	2,930
2	3,050	2,500	16,200	9,340	5,000	20,000	14,800	8,950	3,310	3,610	6,200	2,260
3	2,930	3,160	18,800	7,750	4,500	21,000	13,900	11,200	2,880	3,270	5,400	2,340
4	2,460	4,440	17,200	7,890	4,100	24,000	12,500	15,700	3,750	2,990	4,800	2,530
5	2,030	5,820	14,000	6,180	3,900	28,000	12,200	18,700	4,370	2,650	4,450	2,580
6	2,060	9,590	11,200	5,680	3,700	37,000	10,400	20,200	6,090	3,330	4,270	2,840
7	1,440	9,890	9,670	6,710	3,600	47,800	9,090	32,000	5,720	3,400	4,970	3,320
8	1,190	8,910	8,590	13,800	3,700	46,200	8,130	44,800	4,960	3,700	4,740	2,630
9	1,080	8,420	7,280	39,100	3,900	35,600	8,440	40,500	4,180	4,300	4,310	2,240
10	1,000	8,620	5,660	62,500	3,700	27,000	8,270	44,000	3,940	6,300	6,320	2,520
11	949	8,060	4,410	56,100	3,500	30,300	8,750	45,500	4,050	6,500	5,560	2,710
12	880	6,960	3,880	47,000	3,300	46,400	10,200	35,600	3,500	6,400	5,110	3,100
13	828	6,490	3,720	41,200	3,200	51,700	13,200	28,400	3,110	5,200	6,060	3,300
14	793	6,390	4,100	34,200	3,300	42,600	14,300	22,800	2,830	4,600	5,710	2,800
15	776	6,070	4,480	22,800	5,000	32,900	13,900	18,700	2,610	4,960	4,830	2,250
16	726	5,760	4,720	17,200	13,000	27,700	12,900	15,500	2,250	5,200	4,530	1,870
17	710	5,670	5,530	13,800	34,000	25,800	12,400	13,600	2,140	4,500	4,360	1,950
18	694	6,510	5,240	12,600	33,000	27,000	11,500	11,100	2,290	3,830	3,830	2,160
19	677	10,600	5,590	11,800	23,000	25,200	11,300	9,130	3,360	3,340	3,400	1,950
20	660	14,500	7,220	11,800	17,000	23,400	10,500	7,940	5,380	2,800	2,900	1,870
21	843	13,400	8,660	19,600	13,000	22,800	9,830	7,710	6,480	2,300	2,600	1,850
22	760	11,800	9,100	40,800	11,000	27,700	8,470	7,180	8,150	2,120	2,600	2,430
23	743	12,800	8,940	44,100	9,500	28,400	8,150	6,530	18,400	2,220	2,700	2,430
24	845	18,400	8,640	34,200	8,500	25,800	7,300	5,800	17,800	5,170	2,700	2,320
25	828	18,900	8,110	24,000	9,000	29,000	6,910	5,400	14,600	14,600	2,500	2,100
26	932	16,700	8,000	17,200	15,000	20,200	6,520	5,000	11,000	22,300	2,180	1,820
27	1,110	14,200	8,080	13,500	28,000	17,400	6,520	4,720	8,620	19,000	2,190	1,680
28	1,500	12,100	7,630	10,400	27,000	15,200	6,120	4,580	7,030	11,400	2,250	1,720
29	1,780	9,950	9,500	8,000		14,700	6,300	4,290	6,110	12,200	2,210	1,880
30	2,100	9,110	11,100	7,000		13,200	6,490	3,900	4,610	12,200	2,420	1,930
31	2,160		11,400	6,200		12,500		3,370		9,730	3,380	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,050	660	1,320	0.172	0.20
November	18,900	2,270	9,266	1.21	1.35
December	18,800	3,720	8,640	1.13	1.30
January	62,500	5,680	21,400	2.79	3.22
February	34,000	3,200	10,750	1.40	1.46
March	51,700	12,500	28,020	3.65	4.21
April	15,000	6,120	10,140	1.32	1.47
May	45,500	3,370	16,440	2.14	2.47
June	18,400	2,140	5,905	.770	.86
July	22,300	2,120	6,380	.832	.96
August	7,500	2,180	4,096	.534	.62
September	3,320	1,680	2,344	.306	.34
The year	62,500	660	10,430	1.36	18.46

Ohio River at Sewickley, Pa.

Location.- Water-stage recorder, lat. 40°31'50", long. 80°11'20", 200 feet above highway bridge at Sewickley, Allegheny County, half a mile above mouth of Narrows Run, and 1¼ miles above Dashields Dam. Zero of gage is 690.00 feet above mean sea level.
Drainage area.- 19,500 square miles.
Records available.- October 1933 to September 1935.
Extremes.- Maximum discharge during year, 225,000 second-feet Mar. 13 (gage height, 15.7 feet); minimum daily discharge, 3,140 second-feet Oct. 20.
1933-35: Maximum discharge, that of Mar. 13, 1935; minimum, about 2,000 second-feet July 25, 1934; minimum daily discharge, 2,150 second-feet July 25, 1934.
Maximum stage known, about 28 feet during flood of March 1907 (discharge not determined).
Remarks.- Records good e xcept those below 400 second-feet, and those estimated on basis of the gage at Pittsburgh for period of construction on Dashields Dam, Oct. 1-21, which are fair. Some regulation at low stages from operation of locks upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36,400	4,040	24,500	29,500	17,400	60,100	29,400	15,600	9,670	9,490	14,300	7,080
2	23,600	6,160	35,100	52,800	16,200	53,800	30,300	22,100	8,860	8,770	28,200	6,320
3	18,300	7,690	41,600	40,600	16,200	60,100	35,800	73,700	9,220	8,770	55,900	5,440
4	14,100	9,310	39,600	31,200	16,200	70,800	33,000	81,800	11,100	8,680	86,200	14,900
5	10,500	11,500	33,900	24,500	17,400	70,800	28,600	66,400	11,000	7,600	68,800	39,600
6	9,090	17,400	26,900	18,800	16,800	75,200	26,900	55,900	11,500	6,800	41,600	43,600
7	9,740	22,200	23,000	17,400	15,000	88,400	25,300	79,300	11,800	7,870	47,200	29,400
8	7,930	22,200	20,100	20,100	14,400	84,000	28,600	174,000	11,200	8,500	78,500	21,200
9	5,890	19,400	16,200	34,500	15,000	70,800	42,600	134,000	10,400	13,800	79,600	13,100
10	5,220	18,100	12,400	90,300	17,400	52,800	40,600	106,000	12,900	21,500	55,900	10,900
11	5,080	16,800	10,900	106,000	26,100	57,600	35,800	115,000	13,700	23,000	36,800	11,200
12	4,940	14,200	9,850	86,200	31,200	140,000	38,600	90,600	12,700	16,200	25,300	11,100
13	4,270	12,900	8,860	64,300	26,100	217,000	49,600	68,600	11,000	13,100	22,200	10,100
14	3,950	12,600	9,130	49,600	23,700	154,000	60,100	58,000	9,400	11,500	19,400	9,220
15	3,710	12,100	9,490	45,600	28,600	99,400	60,100	52,800	8,410	9,580	19,400	7,440
16	3,420	11,500	9,760	39,600	48,600	75,200	53,800	55,900	7,440	9,040	20,100	6,400
17	3,420	11,300	10,300	37,700	64,300	66,400	45,600	48,600	7,520	9,220	17,400	5,680
18	3,300	11,100	11,500	65,200	60,100	58,000	39,600	35,800	8,860	8,050	14,400	6,220
19	3,190	12,800	12,500	68,600	50,600	52,800	33,900	25,300	14,500	7,600	10,800	5,840
20	3,140	18,100	14,200	52,800	41,600	50,600	30,300	21,500	26,100	7,200	9,580	6,560
21	3,300	21,500	17,400	79,600	33,900	50,600	27,800	19,400	25,300	6,240	9,040	6,800
22	4,540	19,400	20,800	146,000	28,600	53,800	23,000	23,700	23,000	5,680	8,230	6,320
23	4,800	20,100	20,100	152,000	35,800	58,000	21,500	32,100	25,300	8,460	7,600	6,000
24	3,260	37,500	18,100	104,000	44,600	60,100	19,400	26,100	33,900	9,580	7,690	6,880
25	3,290	54,800	16,800	70,800	35,800	55,900	18,800	20,800	33,000	14,000	7,040	5,840
26	4,220	45,600	16,800	48,600	60,100	55,900	16,800	18,100	25,300	35,200	6,560	5,280
27	4,850	36,800	31,800	35,800	81,800	50,600	15,600	14,400	19,400	39,600	5,680	4,850
28	5,920	27,600	42,600	25,300	70,800	46,600	13,600	13,700	16,200	26,900	4,920	4,780
29	6,160	24,500	37,700	19,400		39,600	12,500	13,400	14,100	21,500	6,840	4,220
30	6,240	20,100	34,800	20,100		35,800	13,300	12,800	11,600	22,200	7,040	4,290
31	4,410		27,800	19,400		31,200		11,300		18,800	6,880	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	36,400	3,140	7,425	0.381	0.44
November	54,800	4,040	19,320	.991	1.11
December	42,600	8,860	21,440	1.10	1.27
January	152,000	17,400	54,720	2.81	3.24
February	81,800	14,400	34,080	1.75	1.82
March	217,000	31,200	70,840	3.63	4.18
April	60,100	12,500	31,690	1.63	1.82
May	174,000	11,300	51,180	2.62	3.02
June	33,900	7,440	15,150	.777	.87
July	39,600	5,680	13,690	.702	.81
August	86,200	4,920	26,750	1.37	1.58
September	43,600	4,220	10,890	.558	.62
The year	217,000	3,140	29,840	1.53	20.78

Brokenstraw Creek at Youngsville, Pa.

Location.- Chain gage, lat. 41°51'05", long. 79°19'05", at highway bridge at Youngsville, Warren County, 1,000 feet above mouth of Mathews Run. Zero of gage is 1,187.92 feet above mean sea level.
Drainage area.- 304 square miles.
Records available.- October 1919 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; October 1909 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 21 years (1910-15, 1919-35), 540 second-feet.
Extremes.- Maximum discharge during year, about 4,530 second-feet Jan. 9 (gage height, 6.7 feet, from graph based on gage readings); minimum, 19 second-feet Oct. 14.
1909-35: Maximum gage height, 13.2 feet, present datum, Mar. 25, 1913 (discharge not determined); minimum, that of Oct. 14, 1934.
Remarks.- Records fair. Discharge estimated for period of channel changes, Oct. 27 to Nov. 11, for periods of ice effect, Dec. 10-19, Jan. 26 to Feb. 1, Feb. 7, 8, and for period of missing gage-height record, June 9-17.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	75	670	390	180	705	450	312	150	119	261	58
2	36	85	1,210	268	175	560	410	312	158	97	203	76
3	34	75	988	261	181	810	370	366	203	95	181	78
4	34	110	320	209	181	1,040	350	1,010	197	254	158	84
5	32	190	254	206	155	1,810	275	636	331	350	137	97
6	33	140	223	223	150	2,610	268	576	209	312	121	93
7	30	130	194	1,160	140	2,700	247	1,140	187	167	131	89
8	28	140	187	4,030	160	1,830	247	1,440	164	382	131	78
9	27	160	131	4,330	187	920	275	1,010	140	781	121	150
10	26	130	120	3,830	194	811	294	1,540	120	450	129	223
11	27	110	110	2,430	194	1,620	275	1,440	105	233	142	175
12	24	104	100	1,140	153	2,700	275	898	100	158	121	131
13	22	126	100	680	153	2,030	390	515	95	220	111	111
14	19	121	100	630	175	1,090	470	430	90	187	104	95
15	25	107	100	438	731	755	430	350	85	155	97	104
16	25	129	110	450	1,790	865	370	350	80	131	95	111
17	25	131	120	410	1,650	920	350	294	85	116	89	114
18	27	199	130	294	1,140	865	390	264	91	107	82	99
19	27	450	160	175	680	755	370	206	104	97	78	95
20	27	515	403	312	492	680	294	206	126	93	78	134
21	32	390	450	1,630	331	980	275	181	131	84	78	144
22	37	275	450	2,520	370	1,100	254	190	147	95	93	107
23	40	438	390	2,190	244	810	226	178	1,060	168	86	119
24	37	492	331	960	240	755	220	172	1,650	501	80	107
25	36	430	312	582	347	630	200	164	1,260	2,060	73	93
26	36	294	294	360	1,220	492	184	158	575	1,580	68	84
27	45	169	331	300	1,060	410	175	153	331	735	76	82
28	70	169	370	260	980	390	153	155	244	637	102	121
29	80	167	582	230		350	153	153	230	705	104	164
30	73	240	655	205		410	312	155	153	655	95	134
31	70		515	190		515		153		430	95	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	80	19	36.2	0.119	0.14
November	515	75	210	.691	.77
December	1,210	100	336	1.11	1.28
January	4,330	175	1,009	3.32	3.83
February	1,790	140	488	1.61	1.68
March	2,700	350	1,062	3.49	4.02
April	470	153	298	.980	1.09
May	1,540	153	487	1.60	1.84
June	1,650	80	287	.944	1.05
July	2,060	84	392	1.29	1.49
August	261	68	114	.375	.43
September	223	58	112	.368	.41
The year	4,330	19	404	1.33	18.03

Tionesta Creek at Nebraska, Pa.

Location.- Staff gage, lat. 41°28'25", long. 79°23'05", 500 feet below highway bridge at Nebraska, Forest County, a third of a mile below mouth of Coon Creek. Zero of gage is 1,079.00 feet above mean sea level.
Drainage area.- 481 square miles.
Records available.- October 1931 to September 1935 in reports of U. S. Geological Survey; October 1909 to September 1911 in report of Flood Commission of Pittsburgh, 1911; August 1923 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 10 years (1925-35), 834 second-feet.
Extremes.- Maximum discharge during year, about 12,700 second-feet Feb. 26 (gage height, 9.5 feet, from graph based on gage readings); minimum, 45 second-feet Oct. 19, 20 (gage height, 0.31 foot).
1909-11, 1923-35: Maximum discharge, about 16,900 second-feet Mar. 4, 1934 (gage height, 11.4 feet, from graph based on gage readings); minimum, 25 second-feet Sept. 7-10, 25, 1927.
Remarks.- Records fair. Discharge estimated for periods of ice effect, Dec. 10-19, Jan. 25 to Feb. 25.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	272	198	710	1,020	310	1,200	775	685	208	301	715	92
2	168	226	830	950	310	1,120	715	655	192	262	566	84
3	122	194	681	950	310	1,200	685	840	352	239	484	79
4	100	414	624	890	310	1,200	595	1,810	745	221	439	97
5	86	770	569	740	310	1,200	566	1,630	507	208	337	131
6	78	770	516	1,160	310	2,680	536	1,630	368	175	282	124
7	81	681	490	1,230	310	3,490	490	3,440	282	160	352	103
8	74	740	439	1,650	380	2,710	495	3,770	292	262	373	81
9	76	710	414	3,740	500	2,020	513	2,590	272	898	296	89
10	74	542	385	4,090	700	1,820	566	4,070	235	406	267	171
11	57	490	375	2,710	500	2,470	513	2,960	192	282	244	149
12	54	454	365	1,840	420	4,380	513	2,020	168	235	208	105
13	51	410	360	1,390	400	3,220	595	1,820	160	204	179	84
14	48	381	360	1,230	380	2,240	566	1,450	149	187	171	75
15	48	325	360	1,090	800	1,820	536	1,280	134	152	160	79
16	48	307	360	890	1,200	1,720	595	975	124	124	342	84
17	48	405	365	890	950	1,820	566	905	128	124	230	77
18	48	681	380	770	770	1,540	595	775	450	105	149	68
19	47	1,160	430	624	660	1,360	566	685	467	97	118	66
20	45	1,310	652	710	600	1,450	519	625	905	89	111	128
21	50	950	681	1,250	570	1,820	501	536	840	84	121	152
22	52	770	542	2,950	550	1,820	478	495	2,050	79	134	115
23	58	1,390	490	1,940	540	1,540	467	472	2,130	536	128	92
24	60	2,140	459	1,310	540	1,540	428	439	1,450	1,700	103	77
25	60	1,310	429	900	2,000	1,540	395	384	1,080	4,700	92	68
26	64	1,090	624	700	5,150	1,360	347	342	808	3,740	84	64
27	106	890	890	500	1,920	1,160	326	301	715	2,050	79	64
28	194	770	830	410	1,360	1,080	395	287	566	1,080	179	94
29	230	681	1,020	350		1,040	395	277	450	1,820	145	156
30	198	652	1,090	330		905	566	267	390	1,160	141	115
31	191		890	320		808		244		872	94	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	272	45	93.2	0.194	0.22
November	2,140	194	727	1.51	1.68
December	1,090	360	568	1.18	1.36
January	4,090	320	1,275	2.65	3.06
February	5,150	310	824	1.71	1.78
March	4,380	808	1,783	3.71	4.28
April	775	326	527	1.10	1.23
May	4,070	244	1,247	2.59	2.99
June	2,130	124	560	1.16	1.29
July	4,700	79	727	1.51	1.74
August	715	79	236	.491	.57
September	171	64	98.8	.205	.23
The year	5,150	45	724	1.51	20.43

Oil Creek at Rouseville, Pa.

Location.- Chain gage, lat. 41°28'55", long. 79°41'40", at highway bridge 400 feet above mouth of Cherrytree Run, 1 mile above Rouseville, Venango County, and 1½ miles above former gaging station.
Drainage area.- 300 square miles.
Records available.- June 1932 to September 1935.
Extremes.- Maximum discharge during year, 4,370 second-feet Jan. 9 (gage height, 6.9 feet, from graph based on gage readings); minimum, 23 second-feet Oct. 14-16 (gage height, 1.78 feet).
1932-35: Maximum discharge, about 6,360 second-feet (revised) Jan. 1, 1934 (gage height, 8.2 feet, from graph based on gage readings); minimum, 22 second-feet July 29, Sept. 5, 7, 1934 (gage height, 1.76 feet).
Remarks.- Records good except those estimated for periods of ice effect, Dec. 9-20, Jan. 26 to Feb. 14, which are fair. Records include discharge of Cherrytree Run. Some regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	53	81	912	385	195	558	317	360	113	113	133	58
2	43	96	1,340	260	185	525	317	317	101	101	110	58
3	40	81	525	260	180	960	317	438	101	98	118	52
4	34	126	385	242	175	1,300	277	1,040	226	196	101	68
5	32	210	297	181	170	1,570	260	730	226	181	89	101
6	32	151	242	226	170	3,130	260	730	226	154	80	74
7	33	138	210	402	170	1,910	242	1,780	196	126	168	58
8	30	168	181	1,350	190	1,390	242	1,680	181	113	126	52
9	30	196	160	3,370	250	880	277	960	154	317	103	78
10	28	149	150	3,370	300	920	277	1,780	133	196	101	196
11	28	128	145	1,550	260	1,970	242	1,000	116	128	149	116
12	26	133	140	880	240	3,040	260	730	108	98	103	80
13	25	144	140	625	230	1,600	360	525	103	98	82	68
14	23	151	140	695	230	1,040	317	465	94	98	74	60
15	24	136	140	558	1,020	842	277	410	89	78	68	66
16	24	126	140	465	2,490	920	317	338	76	72	70	68
17	25	141	150	465	1,260	842	297	297	89	68	74	62
18	25	462	170	410	695	730	338	260	168	58	58	54
19	25	465	220	338	590	625	297	242	210	58	54	52
20	25	438	800	438	465	730	277	210	242	52	52	110
21	27	277	1,390	1,750	317	960	242	210	1,260	46	57	106
22	35	226	625	3,650	385	920	226	196	1,060	54	68	78
23	40	379	338	1,460	317	805	210	196	920	94	68	68
24	43	595	242	698	297	1,040	196	168	625	277	52	60
25	43	338	242	525	317	730	196	168	360	1,610	47	55
26	36	226	260	350	1,290	590	181	154	260	794	47	52
27	54	210	438	290	1,210	465	168	144	210	297	50	52
28	68	181	338	260	768	438	242	138	181	196	116	94
29	89	168	465	235		410	226	138	151	242	94	106
30	87	272	730	220		360	317	138	131	196	66	82
31	77		317	205		338		126		154	64	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	89	23	40.4	0.135	0.16
November	595	81	220	.733	.82
December	1,390	140	386	1.29	1.49
January	3,650	181	842	2.81	3.24
February	2,490	170	513	1.71	1.78
March	5,130	338	1,050	3.50	4.04
April	360	168	266	.887	.99
May	1,780	126	518	1.73	1.99
June	1,260	76	270	.900	1.00
July	1,610	46	205	.683	.79
August	168	47	85.2	.284	.33
September	196	52	76.1	.254	.28
The year	3,650	23	373	1.24	18.90

French Creek at Carters Corners, Pa.

Location.- Chain gage; lat. 41°57'20", long. 79°52'40", at highway bridge at Carters Corners (formerly called Kimmeytown), Erie County, 4 miles northwest of Union City, and 5 miles upstream from mouth of South Branch of French Creek. Zero of gage is 1,235.7 feet above mean sea level.
Drainage area.- 208 square miles.
Records available.- October 1919 to September 1920; October 1932 to September 1935 in reports of U. S. Geological Survey; May 1910 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 19 years (1910-16, 1919-29, 1932-35), 411 second-feet.
Extremes.- Maximum discharge during year, 4,470 second-feet Jan. 9 (gage height, 7.7 feet, from graph based on gage readings); minimum, 7.6 second-feet Oct. 20 (gage height, 0.52 foot).
1910-35: Maximum discharge (estimated), 9,940 second-feet Mar. 25, 1913; maximum gage height, about 15.2 feet Mar. 12, 1920 (caused by ice jam); minimum discharge not determined.
Remarks.- Records good except those estimated for periods of ice effect, Dec. 9-17, 23-28, Jan. 3-7, 14-19, Jan. 25 to Feb. 15, and those for period of shifting control, July 27 to Sept. 30, which are fair.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	49	1,080	437	125	615	476	228	56	48	74	38
2	16	71	1,200	276	125	535	400	198	60	44	58	35
3	13	58	575	200	125	655	328	228	57	42	56	30
4	12	69	328	170	125	1,000	276	495	131	81	50	45
5	12	124	243	150	125	1,680	228	495	131	170	43	74
6	13	91	198	150	125	2,970	212	476	131	104	39	67
7	11	76	183	700	120	1,520	185	995	118	69	40	51
8	11	91	183	2,100	115	700	170	1,180	129	71	45	44
9	13	126	178	3,860	115	495	183	655	109	113	43	81
10	11	100	173	2,280	115	663	198	850	85	111	43	109
11	9.8	83	170	1,160	110	1,790	183	615	66	76	118	81
12	9.8	113	168	615	110	1,940	198	315	58	61	111	61
13	8.2	126	164	400	110	1,180	345	283	50	96	74	45
14	11	126	160	360	150	750	363	238	46	64	58	49
15	11	117	160	330	1,000	615	293	224	45	53	48	50
16	12	113	165	300	3,060	850	276	196	40	45	45	104
17	12	164	300	290	1,980	800	276	158	45	42	38	76
18	11	418	437	270	700	615	328	131	48	38	32	67
19	9.2	437	437	260	535	476	293	120	45	38	31	64
20	7.6	381	700	310	437	456	228	104	45	35	27	104
21	11	293	750	1,780	363	1,000	170	92	61	30	30	196
22	20	156	495	2,700	328	750	148	85	595	34	74	170
23	22	170	400	1,160	276	535	136	81	535	58	74	104
24	20	260	330	349	310	418	122	85	315	641	50	67
25	18	228	290	250	382	345	113	81	196	1,300	37	56
26	19	183	260	210	1,620	293	95	76	122	575	32	45
27	22	117	250	190	1,240	243	85	71	94	210	34	46
28	29	93	300	170	900	260	117	60	78	170	43	118
29	36	113	535	155		260	122	74	74	238	36	148
30	33	156	750	140		535	228	72	56	136	32	109
31	33		615	130		615		71		96	43	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	36	7.6	15.8	0.076	0.09
November	437	49	157	.755	.84
December	1,200	160	394	1.89	2.18
January	3,860	130	705	3.39	3.91
February	3,060	110	530	2.55	2.66
March	2,970	243	824	3.96	4.56
April	476	85	226	1.09	1.22
May	1,180	60	291	1.40	1.61
June	595	40	121	.582	.65
July	1,300	30	158	.760	.88
August	118	27	50.3	.242	.28
September	196	30	77.8	.374	.42
The year	3,860	7.6	295	1.42	19.30

French Creek at Saegertown, Pa.

Location.- Chain gage, lat. 41°42'50", long. 80°08'50", at highway bridge at Saegertown, Crawford County, half a mile above mouth of Woodcock Creek.
Drainage area.- 629 square miles.
Records available.- April to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; April 1921 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 14 years (1921-35), 1,021 second-feet.
Extremes.- Maximum discharge during year, 7,370 second-feet Jan. 10 (gage height, 9.60 feet); minimum, 22 second-feet Oct. 18 (gage height, 2.10 feet).
1921-35: Maximum discharge, about 17,000 second-feet Jan. 20, 1929 (gage height, 15.9 feet, from graph based on gage readings); minimum, that of Oct. 18, 1934.
Remarks.- Records good except those for low stages and those estimated for periods of ice effect, Dec. 11-16, 27, 28, Jan. 4-6, Jan. 26 to Feb. 15, which are fair. Regulation at low stages from small power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	126	2,290	1,010	470	1,820	1,080	553	178	170	317	107
2	47	137	2,910	668	440	1,730	940	534	156	153	255	107
3	45	144	1,910	578	420	2,590	870	603	160	134	216	101
4	43	175	1,150	450	400	3,240	768	1,230	278	150	224	115
5	45	197		870	400	380	3,830	636	1,230	636	461	167	127
6	38	271		636	400	370	5,490	590	1,150	398	375	160	167
7	36	228		546	1,620	360	5,910	534	2,050	348	238	170	146
8	32	205		485	3,600	370	3,610	485	3,240	333	354	185	134
9	38	242		398	6,050	380	1,820	497	2,190	322	636	170	185
10	34	266		343	7,220	360	1,640	491	3,020	278	584	156	307
11	36	252		320	5,720	350	3,470	491	2,390	229	312	224	293
12	32	238		310	2,720	350	5,220	510	1,310	193	216	392	216
13	29	286		300	1,470	360	4,960	768	1,010	170	204	242	174
14	27	316		300	1,310	400	2,800	836	801	153	274	185	150
15	29	301		310	1,150	1,500	1,910	768	668	140	189	186	146
16	27	276		340	1,010	4,960	1,820	734	578	134	143	143	146
17	27	409		565	1,080	5,910	1,910	701	497	127	134	137	174
18	24	636		801	1,010	3,680	1,730	768	432	167	109	124	164
19	28	905		905	801	1,910	1,390	801	370	156	98	115	146
20	26	905		1,230	1,070	1,470	1,310	668	343	160	104	107	197
21	29	701		1,550	3,560	1,080	1,550	534	312	174	93	109	392
22	33	584		1,470	5,910	1,010	2,390	473	293	1,450	85	98	317
23	30	497		1,150	5,490	905	1,730	414	264	2,590	109	107	264
24	36	553		1,010	2,160	801	1,730	364	233	1,470	211	118	204
25	50	565		905	1,230	1,010	1,310	338	238	768	2,020	115	167
26	56	467		905	900	2,460	1,010	302	212	503	2,520	107	146
27	65	353		850	770	3,240	870	260	204	364	1,040	109	146
28	81	467		850	660	2,590	801	293	197	293	590	134	167
29	86	578		1,230	600		801	322	181	238	768	150	269
30	110	801		1,730	540		801	386	185	200	668	130	264
31	107			1,310	500		1,150		181		450	112	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	110	24	44.0	0.070	0.08
November	905	126	403	.641	.72
December	2,910	300	964	1.53	1.76
January	7,220	400	1,989	3.16	3.64
February	5,910	350	1,355	2.15	2.24
March	5,910	801	2,334	3.71	4.28
April	1,080	260	587	.933	1.04
May	3,240	181	862	1.37	1.58
June	2,590	127	426	.677	.76
July	2,520	85	438	.696	.80
August	392	98	166	.264	.30
September	392	101	188	.299	.33
The year	7,220	24	313	1.29	17.53

French Creek at Utica, Pa.

Location.- Water-stage recorder, lat. 41°26'15", long. 79°57'20", at highway bridge at Utica, Venango County, a third of a mile above Mill Creek. Zero of gage is 1,019.54 feet above mean sea level.
Drainage area.- 1,028 square miles.
Records available.- August 1932 to September 1935.
Extremes.- Maximum discharge during year, 8,830 second-feet Jan. 11 (gage height, 8.16 feet); minimum, 62 second-feet Oct. 20, 21 (gage height, 1.17 feet).
1932-35: Maximum discharge, 11,700 second-feet Mar. 6, 1934; maximum gage height, 9.70 feet Mar. 4, 1934 (caused by ice); minimum discharge, 43 second-feet July 30, 1934 (gage height, 1.03 feet).
Maximum stage known, about 15.7 feet during flood of March 1913 (discharge not determined).
Remarks.- Records good except those estimated for period of missing gage-height record, Nov. 18-26, and for periods of ice effect, Dec. 12-16, Jan. 28 to Feb. 16, which are fair.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	128	261	2,610	1,740	660	3,160	1,440	658	275	279	547	158
2	114	308	3,790	1,150	620	2,730	1,300	791	265	240	437	146
3	114	320	3,550	975	580	3,710	1,170	874	247	213	437	140
4	114	408	2,520	902	560	4,540	1,070	1,360	322	198	338	156
5	110	502	1,750	784	550	5,260	946	1,800	536	216	295	169
6	105	564	1,260	791	540	6,580	866	1,740	634	491	285	169
7	97	605	1,030	1,450	540	7,380	798	2,540	496	406	406	192
8	90	552	888	3,640	550	6,580	751	3,950	469	348	334	192
9	82	535	777	6,580	550	3,920	739	3,630	437	469	316	207
10	80	541	652	8,200	540	2,660	720	4,280	411	739	308	283
11	79	552	605	8,620	540	4,050	707	3,950	352	593	291	386
12	73	558	580	6,200	540	6,580	714	2,660	300	416	396	376
13	73	593	560	5,030	540	6,780	866	1,860	257	394	469	295
14	66	683	550	2,390	560	5,440	1,080	1,440	230	295	334	240
15	66	701	550	2,080	1,000	3,550	1,070	1,210	210	320	272	210
16	66	646	580	1,740	3,500	2,870	998	1,040	195	257	279	198
17	64	739	751	1,690	7,990	2,800	960	909	192	210	233	195
18	64	1,390	1,010	1,690	6,780	2,590	990	791	207	186	204	210
19	63	1,690	1,090	1,440	3,950	2,200	1,040	689	245	169	186	213
20	62	1,540	1,740	1,700	2,660	2,020	982	610	240	150	169	198
21	71	1,340	2,020	4,120	1,960	2,200	831	570	247	140	158	255
22	84	1,090	2,080	7,180	1,640	2,880	707	502	681	143	166	421
23	82	902	1,910	7,580	1,440	2,660	634	469	2,560	148	156	361
24	79	975	1,640	5,730	1,260	2,590	581	427	2,370	198	158	304
25	80	1,130	1,440	2,830	1,480	2,200	530	396	1,360	1,180	175	246
26	110	953	1,440	1,960	3,180	1,690	491	371	859	2,990	161	210
27	123	771	1,340	1,420	4,370	1,390	453	343	628	2,160	148	198
28	180	652	1,300	1,100	3,980	1,210	448	325	486	1,110	161	217
29	210	670	1,880	900		1,200	442	312	396	881	166	225
30	223	1,180	2,460	800		1,150	558	304	334	938	172	307
31	233		2,080	720		1,260		291		732	172	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	233	62	103	0.100	0.12
November	1,690	261	778	.757	.84
December	3,790	550	1,497	1.46	1.68
January	8,620	720	3,004	2.92	3.37
February	7,990	540	1,894	1.84	1.92
March	7,380	1,150	3,414	3.32	3.83
April	1,450	442	829	.806	.90
May	4,280	291	1,326	1.29	1.49
June	2,560	192	548	.534	.60
July	2,990	140	555	.540	.62
August	547	148	269	.262	.30
September	386	140	236	.230	.26
The year	8,620	62	1,205	1.17	15.93

Cussewago Creek near Meadville, Pa.

Location.- Chain gage, lat. 41°40'20", long. 80°12'55", at highway bridge 4 miles northwest of Meadville, Crawford County. Zero of gage is 1,071.77 feet above mean sea level.
Drainage area.- 90.2 square miles.
Records available.- October 1918 to September 1920; October 1931 to September 1935 in reports of U. S. Geological Survey; May 1910 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 25 years, 128 second-feet.
Extremes.- Maximum discharge during year, about 1,750 second-feet Feb. 16 (gage height, 10.9 feet, from graph based on gage readings); minimum, 0.5 second-foot Oct. 15-17 (gage height, 0.36 foot).
1910-35: Maximum gage height, 16.00 feet Mar. 25, 1913 (discharge not determined); minimum discharge, 0.2 second-foot July 31, Aug. 1, 2, 1934.
Remarks.- Records fair except those for Oct. 28 to Nov. 27, which are poor. Discharge estimated for periods of ice effect, Dec. 9-24, Dec. 27 to Jan. 7, Jan. 15-20, Jan. 26 to Feb. 15, Feb. 27 to Mar. 4. Slight regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.4	40	414	80	20	200	66	46	9.6	8.6	8.4	8.6
2	4.6	48	480	60	17	180	62	51	8.6	6.1	5.9	4.8
3	4.2	50	543	50	16	220	58	70	8.0	5.2	6.5	3.6
4	4.2	66	388	45	16	350	54	127	8.4	4.6	5.9	3.4
5	3.8	92	151	40	15	672	46	210	12	3.8	5.7	4.8
6	3.4	112	92	50	15	730	42	241	12	3.1	4.8	6.1
7	2.9	107	70	150	15	672	39	258	11	2.7	7.2	5.2
8	2.2	82	58	354	15	543	34	349	12	12	10	5.5
9	1.7	66	46	622	15	283	36	398	12	46	11	10
10	1.4	66	40	990	15	157	39	373	11	35	9.2	24
11	1.0	74	36	730	15	267	38	411	9.6	19	7.2	40
12	.6	78	32	484	15	495	38	305	8.0	12	5.7	30
13	.6	87	31	454	15	622	59	172	6.9	8.0	4.2	17
14	.6	102	30	122	30	509	82	78	5.7	6.5	3.8	14
15	.5	112	30	117	300	172	92	66	5.3	5.2	4.0	12
16	.5	102	34	113	1,470	189	82	54	5.0	4.2	3.6	9.0
17	.5	107	40	110	935	182	70	44	4.4	4.2	2.7	9.0
18	.6	232	50	110	672	133	78	36	4.4	3.6	2.9	7.6
19	.6	286	70	120	454	122	92	30	6.5	2.7	2.3	6.7
20	.8	196	100	200	219	122	82	26	11	2.0	2.0	5.7
21	1.0	139	200	390	151	151	58	24	16	2.2	2.7	4.6
22	1.4	102	180	850	127	157	40	20	58	2.3	3.6	3.4
23	1.6	102	160	885	112	151	32	18	193	2.7	3.6	2.9
24	1.8	169	150	561	102	182	28	17	208	18	2.9	2.3
25	2.2	196	145	354	117	182	25	16	107	94	2.0	1.7
26	3.4	129	139	150	421	112	22	15	53	175	1.8	2.0
27	5.5	66	135	80	350	78	20	14	32	89	2.2	3.4
28	13.0	51	140	60	250	66	19	13	20	31	3.2	5.7
29	25.0	78	160	45		78	22	12	15	18	11	7.6
30	30.0	216	200	35		92	30	11	12	17	17	9.0
31	34.0		150	25		74		10		13	16	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	34	0.5	5.10	0.057	0.07
November	286	40	112	1.24	1.38
December	543	30	144	1.60	1.84
January	990	25	272	3.02	3.48
February	1,470	15	211	2.34	2.44
March	730	66	263	2.92	3.37
April	92	19	49.5	.549	.61
May	411	10	113	1.25	1.44
June	208	4.4	29.5	.327	.36
July	175	2.0	21.2	.235	.27
August	17	1.8	5.78	.064	.07
September	40	1.7	8.99	.100	.11
The year	1,470	.5	103	1.14	15.44

Sugar Creek at Sugarcreek, Pa.

Location.- Chain gage, lat. 41°25'45", long. 79°52'45", at highway bridge three quarters of a mile north of Sugarcreek, Venango County, three quarters of a mile above mouth, and 3 miles northwest of Franklin.
Drainage area.- 166 square miles.
Records available.- August 1932 to September 1935.
Extremes.- Maximum discharge observed during year, about 2,060 second-feet Jan. 21 (gage height, 5.12 feet); minimum, 9.6 second-feet Oct. 10 (gage height, 1.34 feet).
1932-35: Maximum discharge observed, about 2,950 second-feet Jan. 1, 1934 (gage height, 6.03 feet); minimum, that of Oct. 10, 1934.
Remarks.- Records fair. Discharge estimated for periods of ice effect, Dec. 8-16, 24-28, Jan. 1-6, 14-19, Jan. 24 to Feb. 15, Feb. 23, 24, Mar. 9, 10. Some regulation owing to operation of mills upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	72	652	160	120	328	164	153	58	52	55	21
2	19	72	475	145	110	328	159	176	60	49	51	23
3	19	60	305	130	100	640	153	228	60	47	76	19
4	18	100	246	125	90	640	132	400	142	51	55	29
5	19	123	188	120	84	805	130	285	87	52	49	42
6	16	109	161	125	81	980	132	328	98	48	45	27
7	18	100	137	246	80	738	118	940	80	39	127	21
8	18	109	115	428	81	640	132	672	76	36	82	21
9	16	95	95	1,480	82	400	135	428	69	49	67	33
10	13	72	85	1,050	80	300	127	455	62	37	80	45
11	14	78	80	640	80	805	123	305	60	36	89	30
12	11	91	78	400	81	1,120	148	246	51	31	62	27
13	14	91	76	305	82	738	159	221	49	72	52	21
14	10	100	75	240	90	545	148	208	47	42	47	22
15	13	91	75	200	600	428	140	176	47	34	40	19
16	13	69	78	180	1,020	428	142	161	44	41	65	23
17	16	137	118	160	575	375	135	142	41	31	49	19
18	15	285	106	150	455	305	140	132	82	33	41	18
19	16	350	109	150	328	305	130	118	83	29	36	19
20	16	246	265	436	285	350	118	113	80	29	31	21
21	16	208	228	1,370	265	515	109	106	85	27	34	22
22	27	185	188	1,140	191	400	102	102	634	34	33	18
23	18	285	161	261	176	455	95	91	265	47	29	18
24	16	265	150	230	170	455	91	93	176	127	25	16
25	12	170	140	210	180	350	87	85	127	361	23	16
26	21	142	135	200	776	285	80	80	104	170	25	15
27	34	127	135	195	515	246	83	74	89	102	27	18
28	55	111	150	185	400	246	123	72	76	111	34	39
29	54	118	350	180		204	100	74	76	102	27	22
30	48	182	285	160		173	176	76	62	74	21	21
31	57		188	130		176		65		62	19	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	57	10	21.8	0.131	0.15
November	350	60	141	.849	.95
December	652	75	182	1.10	1.27
January	1,480	120	359	2.16	2.49
February	1,020	80	256	1.54	1.60
March	1,120	173	475	2.86	3.30
April	176	80	127	.765	.85
May	940	65	220	1.33	1.53
June	634	41	102	.614	.68
July	361	27	66.3	.399	.46
August	127	19	48.3	.291	.34
September	45	15	23.5	.142	.16
The year	1,480	10	168	1.01	13.78

Clarion River near Piney, Pa.

Location.- At hydroelectric plant of the Clarion River Power Co. lat. 41°11'30", long. 79°26'00", 2½ miles upstream from Piney, Clarion County, and 3 miles southwest of Clarion.
Drainage area.- 951 square miles.
Records available.- October 1933 to September 1935 in reports of U. S. Geological Survey; October 1924 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 11 years, 1,510 second-feet.
Remarks.- Discharge computed from power-house records. Part of monthly table corrected for storage. Records furnished by the Clarion River Power Co.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	682	46	2,160	890	1,510	3,010	1,790	833	543	501	938	314
2	1,680	52	1,340	1,180	723	2,590	1,550	2,110	58	710	890	527
3	746	266	1,980	1,200	535	1,940	1,620	1,940	471	834	1,260	605
4	306	302	1,700	1,390	742	4,020	1,590	2,910	748	62	286	781
5	702	1,160	1,330	591	790	3,760	2,570	1,890	766	1,070	639	586
6	202	1,930	1,360	823	802	4,930	1,000	3,310	596	62	636	1,440
7	28	1,980	1,670	1,350	667	11,700	62	6,150	1,140	144	892	1,550
8	30	1,630	1,140	1,790	1,020	8,180	887	6,670	488	1,290	952	267
9	31	1,510	322	4,940	1,880	5,250	910	6,270	60	2,090	1,030	713
10	33	1,710	667	8,180	59	3,680	1,020	7,980	576	786	947	411
11	32	611	528	6,240	61	5,430	1,380	6,260	663	642	348	44
12	32	868	439	5,590	426	17,800	2,070	5,500	450	1,000	841	81
13	32	945	557	2,510	590	8,480	917	7,900	320	119	678	109
14	33	957	788	3,090	1,050	5,530	596	3,210	401	63	622	47
15	33	905	614	2,740	1,610	4,430	1,200	2,920	60	871	522	47
16	34	864	765	1,610	2,170	4,170	1,230	2,650	166	870	867	48
17	34	994	798	2,240	774	3,260	1,150	2,630	73	739	918	48
18	35	760	365	2,380	1,540	3,200	1,180	1,430	355	560	64	48
19	35	2,000	1,120	1,590	1,310	4,900	1,160	156	844	229	427	49
20	227	1,920	871	617	1,360	3,490	1,390	1,370	2,100	91	513	50
21	35	1,740	780	3,170	937	10,400	557	1,140	1,910	58	333	260
22	35	1,600	750	5,830	1,630	4,620	976	9,950	2,120	58	593	51
23	78	2,940	335	4,980	654	5,130	853	7,380	2,860	220	618	90
24	35	4,340	913	3,580	204	3,130	772	8,300	1,770	3,080	787	52
25	36	1,620	242	3,030	1,410	3,320	772	9,110	1,910	4,350	170	53
26	36	2,460	767	2,110	3,960	3,340	918	3,990	1,610	4,040	579	85
27	189	2,100	788	619	4,090	2,880	755	7,400	1,260	3,080	250	77
28	38	2,730	1,670	1,170	3,020	2,700	383	7,840	1,890	868	62	219
29	40	624	1,790	1,030		3,110	761	8,490	553	2,100	63	54
30	42	1,490	787	1,170		2,460	838	57	53	1,560	973	85
31	44		1,620	816		655		4,110		961	978	

Month	Observed			Storage	Corrected for storage		
	Maximum	Minimum	Mean	(Mean)	Mean	Per square mile	Run-off in inches
October	1,680	28	180	+ 93	273	0.287	0.33
November	4,340	46	1,435	+ 69	1,504	1.58	1.76
December	2,160	242	999	+ 9	1,008	1.06	1.22
January	8,180	591	2,531	+ 21	2,552	2.68	3.09
February	4,090	59	1,269	- 15	1,254	1.32	1.38
March	17,800	655	4,887	+ 8	4,895	5.15	5.94
April	2,570	62	1,095	+ 6	1,101	1.16	1.29
May	9,950	57	4,576	- 1	4,575	4.81	5.54
June	2,860	53	894	- 7	887	.933	1.04
July	4,350	58	1,068	- 11	1,057	1.11	1.28
August	1,260	62	635	- 45	590	.620	.71
September	1,550	44	293	- 32	261	.274	.31
The year	17,800	28	1,666	+ 8	1,674	1.76	23.89

Redbank Creek at St. Charles, Pa.

Location.- Chain gage, lat. 40°59'40", long. 79°23'30", at industrial railroad bridge at St. Charles, Clarion County, a quarter of a mile below mouth of Leatherwood Creek. Zero of gage is 976.24 feet above mean sea level.
Drainage area.- 528 square miles.
Records available.- October 1918 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; October 1909 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 22 years (1910-14, 1915-16, 1918-35), 876 second-feet.
Extremes.- Maximum discharge during year, 11,200 second-feet May 7 (gage height, 8.55 feet); minimum, 54 second-feet Oct. 20 (gage height, 1.04 feet).
1909-35: Maximum discharge, about 21,000 second-feet Dec. 14, 1927; maximum gage height, 14.0 feet Mar. 12, 1920 (affected by ice); minimum discharge, 10 second-feet Aug. 9, 1910 (gage height, 0.71 foot).
Remarks.- Records fair. Discharge estimated for period of doubtful gage-height record, Dec. 1-3, and for periods of ice effect, Dec. 11-18, Jan. 29 to Feb. 7. Some regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	545	216	900	1,100	350	1,590	645	320	216	270	578	162
2	392	234	1,300	1,080	320	1,420	610	574	188	223	578	153
3	266	226	1,050	910	300	2,800	545	1,510	172	191	1,170	139
4	216	335	830	718	280	3,640	480	2,190	392	181	1,170	457
5	188	750	755	545	260	3,020	450	1,700	512	172	870	1,270
6	165	1,320	610	578	250	4,320	450	1,590	284	153	512	830
7	148	1,170	578	645	250	4,680	392	8,110	246	165	990	545
8	130	910	480	936	250	3,970	392	7,260	219	194	950	355
9	125	680	392	2,830	420	2,730	420	3,970	205	697	830	315
10	115	545	279	3,970	610	2,060	480	4,870	191	450	645	320
11	105	450	230	3,170	545	3,420	545	3,640	175	315	680	292
12	96	420	225	1,940	480	6,050	578	2,450	162	266	645	219
13	86	420	220	1,420	345	3,970	578	2,060	148	270	545	201
14	78	392	220	1,540	365	2,870	578	1,590	130	219	420	191
15	74	345	220	1,170	775	1,820	512	1,270	120	178	365	168
16	74	320	220	950	1,700	1,700	512	910	120	148	610	142
17	68	365	230	1,120	1,480	1,480	512	755	115	142	645	128
18	62	610	250	1,080	910	1,320	480	680	142	123	420	112
19	59	830	306	792	792	1,120	450	578	1,000	110	365	110
20	56	870	545	1,040	680	1,320	392	512	1,450	100	345	125
21	66	755	578	3,350	512	1,270	392	450	792	136	230	139
22	66	645	512	6,920	480	1,320	360	420	1,150	181	266	201
23	70	1,270	450	3,970	325	1,270	365	365	1,120	299	242	156
24	74	2,730	450	3,640	288	1,320	335	330	1,170	2,420	198	123
25	72	1,820	420	1,660	550	1,120	297	292	1,080	5,590	172	112
26	105	1,270	755	1,270	3,650	990	270	274	792	2,600	156	100
27	139	1,080	950	870	3,020	870	246	242	578	1,370	148	93
28	284	792	792	545	1,820	755	284	226	420	1,060	545	105
29	340	718	1,040	470		950	292	246	350	2,570	335	115
30	306	792	1,040	420		870	292	258	320	1,540	250	112
31	262		718	380		718		242		870	226	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	545	56	156	0.295	0.34
November	2,730	216	776	1.47	1.64
December	1,300	220	566	1.07	1.23
January	6,920	380	1,646	3.12	3.60
February	3,650	250	786	1.49	1.55
March	6,050	718	2,153	4.08	4.70
April	645	246	438	.829	.92
May	8,110	226	1,609	3.05	3.52
June	1,450	115	465	.881	.98
July	5,590	100	748	1.42	1.64
August	1,170	148	519	.983	1.13
September	1,270	93	250	.473	.53
The year	8,110	56	847	1.60	21.78

Mahoning Creek near Dayton, Pa.

Location.- Chain gage, lat. 40°54'05", long. 79°13'35", at Independence Bridge, three quarters of a mile above mouth of Foundry Run, and 1 3/4 miles northeast of Dayton, Armstrong County.
Drainage area.- 321 square miles.
Records available.- October 1920 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; August 1916 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 15 years (1920-35), 555 second-feet.
Extremes.- Maximum discharge during year, 4,960 second-feet May 7 (gage height, 6.39 feet); minimum, 40 second-feet Sept. 28 (gage height, 1.69 feet).
1916-35: Maximum discharge, 11,000 second-feet Feb. 20, 1918 (gage height, 9.6 feet, from graph based on gage readings); minimum, 8.0 second-feet Oct. 17, 1928 (gage height, 1.40 feet).
Remarks.- Records good except those for high stages and those estimated for periods of ice effect, Dec. 10-15, Jan. 27 to Feb. 15, which are fair. Slight regulation at low stages from small power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	553	120	1,000	1,570	210	915	497	299	96	143	1,280	117
2	374	110	1,230	1,520	185	1,000	437	710	77	117	1,420	143
3	247	104	1,040	1,040	165	1,800	380	1,040	75	93	1,680	136
4	200	451	872	710	150	2,670	356	1,520	73	85	1,370	933
5	174	830	671	456	135	2,540	326	1,910	267	113	2,030	1,180
6	159	749	546	463	130	3,380	332	2,900	200	104	2,150	872
7	140	671	456	641	130	2,950	332	4,790	123	110	1,680	710
8	126	574	386	1,090	140	2,030	299	4,140	123	543	1,420	456
9	107	497	277	2,030	200	1,420	398	3,530	117	1,570	1,090	338
10	93	411	260	1,910	450	1,910	589	2,950	99	1,380	790	277
11	80	326	250	1,680	400	2,810	749	2,410	88	554	958	170
12	68	252	245	1,140	300	4,300	710	1,910	75	272	872	123
13	61	214	240	1,180	230	2,670	790	1,180	68	166	710	174
14	59	191	240	1,040	200	1,790	749	1,000	64	110	611	123
15	57	227	240	915	450	1,370	648	830	59	136	567	82
16	55	277	257	749	1,180	1,280	582	648	59	130	710	68
17	54	316	282	872	872	1,000	524	567	88	107	611	57
18	57	299	304	1,140	596	830	470	497	252	93	582	59
19	59	450	356	1,040	510	790	411	443	664	77	546	77
20	55	915	405	1,280	437	749	380	368	641	88	463	90
21	55	830	456	2,380	321	1,000	344	316	524	158	356	140
22	55	671	443	4,140	257	915	294	257	531	438	282	130
23	55	1,260	476	2,280	214	1,000	277	237	538	653	227	107
24	55	2,280	456	1,370	418	915	247	242	710	2,980	166	73
25	59	1,520	596	1,140	1,210	830	218	227	641	2,810	140	52
26	99	1,040	1,000	830	2,410	710	200	209	456	1,720	136	50
27	123	915	958	600	1,680	582	182	178	344	830	130	46
28	120	830	710	450	1,180	671	159	155	277	1,140	126	41
29	126	710	830	350		710	151	136	237	2,030	123	52
30	136	671	1,000	300		567	186	178	178	1,680	110	55
31	130		1,230	250		553		143		1,470	123	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	553	54	122	0.380	0.44
November	2,280	104	624	1.94	2.16
December	1,230	240	571	1.78	2.05
January	4,140	250	1,179	3.67	4.23
February	2,410	130	527	1.64	1.71
March	4,300	553	1,505	4.69	5.41
April	790	151	407	1.27	1.42
May	4,790	136	1,159	3.61	4.16
June	710	59	258	.804	.90
July	2,980	77	706	2.20	2.54
August	2,150	110	757	2.36	2.72
September	1,180	41	231	.720	.80
The year	4,790	41	675	2.10	28.54

Crooked Creek near Ford City, Pa.

Location.- Chain gage, lat. 40°43'00", long. 79°31'50", at highway bridge 3½ miles south of Ford City, Armstrong County, and 5 miles above confluence with Allegheny River.
Drainage area.- 280 square miles.
Records available.- October 1918 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; October 1909 to September 1935 in reports of Pennsylvania Department of Forests and Waters. Records prior to July 31, 1933, obtained at a site three quarters of a mile downstream.
Average discharge.- 24 years (1910-13, 1914-35), 437 second-feet.
Extremes.- Maximum discharge during year, about 4,680 second-feet Mar. 12, May 7; maximum gage height observed, 9.76 feet Feb. 16 (affected by ice); minimum discharge, 14 second-feet Sept. 16; minimum daily discharge, 16 second-feet Sept. 15-18.
1909-35: Maximum discharge, about 16,500 second-feet June 29, 1924 (gage height, 13.1 feet, from graph based on gage readings); maximum gage height (estimated), 15.5 feet Mar. 4, 1934 (affected by ice); minimum discharge observed, 0.1 second-foot Sept. 11, 25, 26, 1932.
Remarks.- Records fair. Discharge estimated for periods of ice effect, Dec. 7-25, Jan. 25 to Feb. 16. Probably slight regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,080	85	360	1,330	90	822	238	151	55	40	60	36
2	605	83	605	1,410	80	1,140	224	646	52	32	847	24
3	420	83	440	905	70	2,900	184	1,960	57	34	1,220	25
4	291	88	380	700	65	3,100	160	1,450	73	26	1,150	56
5	208	280	308	342	62	2,450	153	1,020	107	28	476	246
6	184	291	246	360	60	2,280	172	822	65	25	299	102
7	173	380	200	308	60	1,380	160	3,250	56	24	652	59
8	131	276	150	380	70	1,020	160	3,390	55	29	1,980	51
9	121	220	135	692	150	684	284	1,520	48	122	775	49
10	106	162	125	1,270	350	642	476	1,800	47	89	763	32
11	100	184	120	1,080	270	1,520	383	1,320	41	60	981	27
12	94	246	120	750	220	3,830	401	822	37	33	530	23
13	90	162	120	520	180	2,640	920	640	36	40	348	20
14	57	208	120	650	150	1,450	870	555	33	37	315	19
15	73	184	120	480	450	920	640	535	29	36	253	16
16	74	173	125	420	900	729	555	299	27	25	238	16
17	72	196	130	1,180	729	535	438	238	29	23	224	16
18	69	276	135	1,760	555	420	331	210	25	24	111	16
19	62	331	150	960	438	365	284	172	174	22	81	29
20	63	650	250	996	365	640	238	136	243	18	47	740
21	59	520	300	2,160	299	597	197	130	132	19	58	517
22	67	400	260	3,100	284	618	184	120	268	32	94	102
23	64	967	240	1,840	268	576	299	98	401	47	60	45
24	57	2,160	230	905	224	684	268	90	284	43	52	32
25	58	1,180	220	550	430	555	124	86	184	78	42	31
26	81	700	582	380	2,440	496	111	76	142	374	44	24
27	283	480	1,010	270	1,900	383	100	68	114	128	45	24
28	166	380	750	200	1,080	331	104	62	77	81	43	21
29	113	360	605	160		401	114	57	138	100	42	20
30	94	360	480	130		299	120	64	46	69	42	27
31	81		246	100		268		78		43	37	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,080	57	168	0.600	0.69
November	2,160	83	402	1.44	1.61
December	1,010	120	299	1.07	1.23
January	3,100	100	848	3.03	3.49
February	2,440	60	437	1.56	1.62
March	3,830	268	1,119	4.00	4.61
April	920	100	296	1.06	1.18
May	3,390	57	705	2.50	2.88
June	401	25	102	.364	.41
July	374	18	57.5	.205	.24
August	1,980	37	384	1.37	1.58
September	740	16	81.5	.291	.32
The year	3,830	16	410	1.46	19.86

Stony Creek at Johnstown, Pa.

Location.- Wire-weight gage, lat. 40°19'00", long. 78°54'50", at Poplar Street Bridge, at Johnstown, Cambria County, 1½ miles above confluence with Little Conemaugh River. Zero of gage is 1,154.0 feet above mean sea level.
Drainage area.- 467 square miles.
Records available.- October 1918 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; July 1913 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 21 years (1914-35), 780 second-feet.
Extremes.- Maximum discharge during year, 7,280 second-feet Aug. 2 (gage height, 9.26 feet); minimum, 41 second-feet Sept. 19 (gage height, 1.02 feet); minimum daily discharge, 55 second-feet Sept. 19.
1913-35: Maximum discharge, 21,000 second-feet (revised) Mar. 29, 1924 (gage height, 16.9 feet, from graph based on gage readings); minimum (estimated), 5 second-feet Sept. 8, 1929; minimum daily discharge observed, 13 second-feet Oct. 25, 1930.
Maximum stage known, 28.3 feet May 31, 1889 (backwater from Little Conemaugh River; discharge not determined).
Remarks.- Records fair except those estimated for periods of ice effect, Dec. 10-16, Jan. 25 to Feb. 8, and for period of missing gage-height record, June 10-12, which are poor. Diurnal regulation at low stages. Water supply for Cambria plant of the Bethlehem Steel Co. diverted from Quemahoning Reservoir not included in records except in part of monthly table. Record of monthly diversion furnished by Bethlehem Steel Co.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	870	155	1,480	1,520	280	990	532	365	216	104	410	88
2	508	246	1,530	1,390	260	1,480	532	1,180	200	84	4,900	75
3	384	216	990	1,050	240	3,140	486	2,520	187	80	5,120	196
4	295	328	990	870	230	2,840	444	1,460	226	73	3,140	374
5	253	508	815	705	225	2,270	423	1,180	219	140	1,770	670
6	253	444	630	555	220	2,640	464	1,110	190	309	1,250	404
7	246	486	555	680	220	2,450	444	3,840	168	657	1,770	249
8	213	365	464	930	250	2,010	444	2,860	193	828	2,360	149
9	180	295	404	2,650	384	1,320	444	1,930	365	486	1,850	117
10	162	259	330	3,040	580	1,520	532	3,660	250	464	1,180	180
11	149	246	290	2,360	444	2,450	1,050	2,700	200	226	930	155
12	120	239	250	1,690	328	4,410	1,110	1,930	160	165	815	109
13	114	246	225	1,250	328	3,100	1,250	1,610	137	131	605	84
14	109	249	215	1,390	423	2,090	930	1,770	137	111	555	80
15	109	209	210	1,180	1,050	1,690	990	1,390	137	84	532	73
16	93	206	300	1,050	2,020	1,850	930	1,050	126	98	423	71
17	98	209	384	990	1,530	1,390	815	870	126	84	346	88
18	93	277	309	1,050	1,050	1,180	870	705	137	61	295	88
19	98	253	305	815	815	1,050	732	580	232	64	266	55
20	88	246	508	870	680	1,180	630	508	200	65	236	351
21	88	219	444	2,200	404	2,010	555	486	200	600	232	213
22	98	229	384	5,020	580	1,690	508	423	219	2,360	222	131
23	88	902	346	3,040	532	1,590	464	384	239	1,070	200	62
24	80	1,510	328	2,060	580	2,180	444	384	174	464	168	73
25	86	815	420	1,100	1,130	1,610	404	346	213	790	158	64
26	155	732	1,020	800	2,090	1,390	346	328	149	1,110	168	67
27	162	508	1,250	580	1,690	1,050	346	284	101	632	328	64
28	152	464	1,050	460	1,180	990	348	259	126	444	246	61
29	143	630	930	400		870	328	273	114	346	177	61
30	131	1,050	1,050	350		655	404	309	114	273	126	61
31	126		870	310		555		263		216	120	

Month	Observed			Diversion	Corrected for diversion		
	Maximum	Minimum	Mean	(Mean)	Mean	Per square mile	Run-off in inches
October	870	80	185	106	291	0.623	0.72
November	1,510	155	425	100	525	1.12	1.25
December	1,530	210	622	104	726	1.55	1.79
January	5,020	310	1,366	128	1,494	3.20	3.69
February	2,090	220	705	127	832	1.78	1.85
March	4,410	555	1,795	114	1,909	4.09	4.72
April	1,250	328	607	113	720	1.54	1.72
May	3,840	259	1,192	126	1,318	2.82	3.25
June	365	101	182	121	303	.649	.72
July	2,360	61	407	73.7	481	1.03	1.19
August	5,120	120	997	93.7	1,091	2.34	2.70
September	670	55	150	94.3	244	.522	.58
The year	5,120	55	724	108	832	1.78	24.18

Kiskiminetas River at Avonmore, Pa.

Location.- Wire-weight gage, lat. 40°32'05", long. 79°27'55", at highway bridge at Avonmore, Westmoreland County, 1 mile above mouth of Long Run. Zero of gage is 805.64 feet above mean sea level. Chain gage at same site and datum used prior to Dec. 18, 1934.
Drainage area.- 1,723 square miles.
Records available.- June 1907 to September 1913, October 1918 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; May 1907 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 28 years, 2,985 second-feet.
Extremes.- Maximum discharge during year, 33,800 second-feet Aug. 4 (gage height, 18.6 feet, from graph based on gage readings); minimum, 342 second-feet July 20 (gage height, 2.90 feet).
1907-35: Maximum discharge, 91,700 second-feet Mar. 19, 1908 (gage height, 30.8 feet, from graph based on gage readings); minimum observed, 60 second-feet Sept. 18-27, 1908 (gage height, 1.6 feet).
Remarks.- Records good except those estimated for periods of ice effect, Dec. 10-15, Jan. 26 to Feb. 15, Feb. 23, 27, which are poor. Slight regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9,920	705	4,040	6,180	1,250	5,060	2,550	1,820	1,000	467	1,140	560
2	5,060	870	6,660	7,580	1,150	6,070	2,440	3,140	870	438	11,400	528
3	3,680	960	4,930	5,480	1,050	12,700	2,120	12,200	915	412	15,600	528
4	2,770	915	4,410	4,410	1,020	14,200	2,020	8,140	960	412	22,100	843
5	2,120	2,440	3,680	3,210	1,000	10,600	1,820	5,340	1,000	387	8,180	2,120
6	1,820	2,550	2,990	2,880	1,000	11,600	1,920	4,930	960	412	4,670	1,520
7	1,720	2,660	2,660	2,660	1,000	10,400	1,920	15,300	785	864	5,620	960
8	1,420	2,330	2,330	2,990	1,100	8,850	1,920	16,600	785	2,990	8,080	745
9	1,250	1,920	2,020	5,790	2,250	5,910	2,330	9,400	828	2,440	8,300	630
10	1,050	1,520	1,650	10,400	3,000	4,800	2,770	16,000	1,140	1,820	5,340	630
11	960	1,320	1,400	7,800	2,300	10,500	3,440	13,800	915	1,320	4,410	630
12	828	1,320	1,200	5,760	1,900	21,400	3,920	8,490	745	870	3,320	595
13	785	1,320	1,150	4,800	1,600	17,200	5,760	6,510	668	668	2,550	560
14	630	1,520	1,100	5,060	1,500	9,970	5,910	6,210	630	595	2,330	560
15	668	1,320	1,100	4,800	2,500	7,460	5,060	5,340	630	496	2,220	467
16	630	1,140	1,200	4,160	5,810	7,140	4,670	4,160	595	496	1,920	412
17	630	1,140	1,620	5,060	5,340	5,910	4,040	3,440	595	467	1,520	412
18	630	1,420	1,720	6,980	4,410	4,800	3,560	3,100	705	412	1,230	438
19	595	1,720	1,620	6,060	3,920	4,280	3,320	2,550	915	364	1,100	496
20	560	1,720	2,120	4,670	3,320	5,060	2,880	2,330	1,230	342	1,000	1,140
21	560	1,620	2,220	7,840	2,770	5,760	2,550	2,120	870	668	870	1,100
22	595	1,420	2,020	17,200	2,440	6,820	2,330	1,920	915	1,050	828	705
23	560	2,650	1,820	12,400	2,200	5,480	2,120	1,820	915	4,940	915	560
24	528	9,640	1,620	7,970	2,440	7,630	2,020	1,620	1,050	2,330	785	467
25	528	5,910	1,620	6,060	3,210	6,210	1,820	1,420	915	2,330	705	438
26	745	4,160	2,400	3,300	11,000	5,200	1,620	1,320	785	5,810	630	412
27	1,230	3,680	5,910	2,600	8,500	4,280	1,520	1,230	705	4,310	668	412
28	1,050	2,770	4,410	2,100	6,360	3,800	1,420	1,140	595	2,330	870	412
29	1,000	2,660	3,920	1,800		4,040	1,420	1,140	560	3,320	745	387
30	828	3,800	4,540	1,600		3,100	1,520	1,420	496	2,120	668	387
31	745		3,320	1,400		2,660		1,320		1,420	595	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	9,920	528	1,486	0.862	0.99
November	9,640	705	2,304	1.34	1.50
December	6,660	1,100	2,690	1.56	1.80
January	17,200	1,400	5,516	3.20	3.69
February	11,000	1,000	3,048	1.77	1.84
March	21,400	2,660	7,706	4.47	5.15
April	5,910	1,420	2,757	1.60	1.78
May	16,600	1,140	5,331	3.09	3.56
June	1,230	496	823	.478	.53
July	5,810	342	1,526	.886	1.02
August	22,100	595	3,881	2.25	2.59
September	2,120	387	668	.388	.43
The year	22,100	342	3,162	1.84	24.88

Blacklick Creek at Blacklick, Pa.

Location.- Chain gage, lat. 40°28'25", long. 79°12'15", at highway bridge at Gratton, a quarter of a mile northwest of Blacklick, Indiana County, and three quarters of a mile below mouth of Two Lick Creek.
Drainage area.- 390 square miles.
Records available.- August 1904 to September 1913, October 1918 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; August 1904 to December 1905, January 1907 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 28 years (1907-35), 662 second-feet.
Extremes.- Maximum discharge during year, 8,400 second-feet May 10 (gage height, 8.30 feet); minimum, 51 second-feet July 20 (gage height, 2.22 feet).
1904-35: Maximum discharge observed, about 21,000 second-feet Sept. 3, 1912 (gage height, 12.90 feet); minimum, 6 second-feet Sept. 12, 16-27, 1908 (gage height, 1.88 feet).
Remarks.- Records fair. Discharge estimated for periods of ice effect, Dec. 11-19, 24, Jan. 5-7, Jan. 26 to Feb. 8. Slight diurnal regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,260	206	1,510	1,930	230	1,230	452	305	152	73	305	76
2	1,390	255	1,560	1,500	210	1,500	422	1,260	119	64	1,120	73
3	940	210	1,080	1,230	195	3,520	364	2,510	135	62	1,440	80
4	694	310	1,130	812	185	3,370	336	1,620	170	64	1,390	223
5	550	694	854	550	180	2,930	310	1,180	163	70	656	452
6	484	656	732	500	180	3,370	364	1,400	132	64	516	219
7	452	550	620	500	180	2,650	331	5,900	119	62	1,080	122
8	300	484	516	732	190	1,990	364	3,960	116	409	2,250	99
9	265	392	452	1,680	422	1,340	452	2,250	159	236	1,440	102
10	232	336	326	2,250	550	1,370	694	5,860	138	331	854	105
11	202	320	260	1,560	392	4,000	896	2,650	110	163	732	88
12	193	326	230	1,180	310	6,170	854	2,120	99	116	516	80
13	159	310	210	940	294	5,690	1,340	1,620	93	96	452	76
14	155	331	200	1,500	364	2,380	1,130	1,440	86	83	484	68
15	138	279	200	1,080	812	1,790	940	1,080	83	78	320	80
16	132	274	210	896	1,180	1,620	940	772	83	70	305	62
17	125	336	320	1,790	984	1,280	772	656	80	60	236	60
18	129	656	300	1,790	772	984	772	584	88	58	174	66
19	125	584	300	1,180	694	984	620	452	132	55	148	64
20	116	620	732	1,230	550	1,340	550	392	145	105	129	331
21	122	516	422	3,110	392	1,390	452	364	148	86	129	125
22	119	452	516	4,650	392	1,180	422	310	241	488	159	90
23	119	1,160	452	2,510	320	1,280	392	284	279	294	125	73
24	108	1,790	400	1,440	484	1,340	336	255	182	305	99	70
25	105	1,440	422	896	706	1,080	310	223	152	1,800	96	62
26	331	1,030	1,070	650	2,640	940	270	197	132	3,120	86	62
27	310	812	1,290	480	2,120	732	250	193	102	854	88	62
28	305	694	896	390	1,390	694	250	170	88	963	86	66
29	265	854	1,030	330		772	241	178	83	1,460	83	66
30	210	896	984	290		550	300	232	68	550	80	60
31	182		666	250		516		174		364	73	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,260	105	362	0.928	1.07
November	1,790	206	592	1.52	1.70
December	1,560	200	642	1.65	1.90
January	4,650	250	1,285	3.29	3.79
February	2,640	180	618	1.58	1.64
March	6,170	516	1,870	4.79	5.52
April	1,340	241	538	1.38	1.54
May	5,900	174	1,309	3.36	3.87
June	279	68	129	.331	.37
July	3,120	55	407	1.04	1.20
August	2,250	73	505	1.29	1.49
September	452	60	109	.279	.31
The year	6,170	55	702	1.80	24.40

Loyalhanna Creek at New Alexandria, Pa.

Location.- Wire-weight gage, lat. 40°23'40", long. 79°25'55", at highway bridge at New Alexandria, Westmoreland County, 1 3/4 miles below mouth of Crabtree Creek. Chain gage at same site and datum used prior to Dec. 6, 1934. Zero of gage is 917.26 feet above mean sea level.
Drainage area.- 265 square miles.
Records available.- October 1919 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; August 1913 to July 1923, November 1925 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 12 years (1919-22, 1928-35), 442 second-feet.
Extremes.- Maximum discharge during year, 17,900 second-feet Aug. 3 (gage height, 16.0 feet, from graph based on gage readings); minimum, 26 second-feet Sept. 16, 17, 24, 30 (gage height, 1.90 feet).
1913-23, 1925-35: Maximum discharge, that of Aug. 3, 1935; minimum, 2.4 second-feet Oct. 3, 1927 (gage height, 1.46 feet).
Remarks.- Records fair except those estimated for periods of ice effect, Dec. 10-15, Jan. 28 to Feb. 7, which are poor. Some regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	840	132	468	2,590	150	960	320	254	126	56	122	70
2	606	192	416	1,320	140	1,260	342	603	109	40	3,070	70
3	416	199	495	960	130	1,880	320	1,530	119	40	7,490	56
4	342	184	495	721	120	1,600	276	1,140	135	50	6,760	90
5	234	181	390	495	120	1,390	276	900	132	50	1,530	177
6	210	210	320	416	120	1,260	342	780	122	70	1,140	109
7	184	276	297	416	120	1,080	254	2,640	106	45	1,320	97
8	163	297	254	416	163	840	320	1,740	103	50	960	72
9	142	276	234	870	390	606	366	1,260	166	240	663	70
10	126	234	200	1,260	522	606	663	3,340	160	302	495	61
11	112	276	160	840	112	1,320	692	1,780	97	129	441	67
12	97	234	140	663	207	4,280	634	1,140	90	100	320	67
13	100	210	130	1,020	254	2,430	1,260	1,020	84	84	297	45
14	81	184	120	634	320	1,530	1,140	960	78	72	297	45
15	97	156	120	522	721	1,140	960	840	72	61	234	50
16	87	139	196	495	840	1,020	840	634	75	67	254	28
17	81	119	254	840	840	840	663	495	78	56	177	28
18	78	174	184	1,020	634	663	606	390	116	56	146	64
19	70	199	207	721	550	721	522	342	106	45	129	58
20	64	196	441	1,040	468	721	416	297	122	43	116	103
21	81	152	276	2,110	297	1,200	342	254	90	56	106	75
22	70	156	276	2,510	366	1,140	342	254	112	234	90	56
23	78	667	254	1,670	522	1,140	297	234	149	276	67	40
24	67	780	234	960	495	1,530	276	199	116	177	45	28
25	58	721	297	692	840	1,260	254	170	103	156	109	40
26	214	606	495	578	2,500	900	210	170	90	184	94	50
27	149	495	780	441	1,670	780	192	156	78	163	109	36
28	170	390	606	350	1,080	721	214	160	72	320	90	61
29	132	441	634	270		606	192	166	67	276	78	40
30	116	416	550	220		468	254	214	61	142	84	28
31	109		390	180		390		149		129	56	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	840	58	173	0.653	0.75
November	780	119	296	1.12	1.25
December	780	120	333	1.26	1.45
January	2,590	180	879	3.32	3.83
February	2,500	112	525	1.98	2.06
March	4,280	390	1,170	4.42	5.10
April	1,260	192	460	1.74	1.94
May	3,340	149	781	2.95	3.40
June	166	61	104	.392	.44
July	320	40	122	.460	.53
August	7,490	45	867	3.27	3.77
September	177	28	62.7	.237	.26
The year	7,490	28	483	1.82	24.78

Monongahela River at Charleroi, Pa.

Location.- Water-stage recorder, lat. 40°08'30", long. 79°53'35", 1,100 feet above dam at Lock 4, at Charleroi, Washington County, half a mile below mouth of Maple Creek. Zero of gage is 735.33 feet above mean sea level.
Drainage area.- 5,213 square miles.
Records available.- March 1886 to March 1905, October 1933 to September 1935 in reports of U. S. Geological Survey; October 1933 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Extremes.- Maximum discharge during year, 108,000 second-feet Mar. 13 (gage height, 17.0 feet); minimum, about 145 second-feet Oct. 23 (gage height, 2.25 feet); minimum daily discharge, 220 second-feet Oct. 23.
1886-1905, 1933-35: Maximum discharge (estimated), 156,000 second-feet (revised) July 11, 1888 (gage height, 42.0 feet on lower gage at old lock downstream or about 26.1 feet on the present gage); minimum, not determined.
Remarks.- Records good except those below 5,000 second-feet, which are poor. Regulation at low stages from operation of locks upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8,300	730	7,300	14,500	5,000	15,600	8,300	5,400	2,390	2,400	1,720	987
2	6,800	1,050	11,800	15,700	3,970	12,100	11,900	10,100	2,390	2,910	3,210	768
3	5,010	2,250	11,800	12,400	3,540	9,100	16,000	36,900	1,930	2,840	9,970	2,140
4	2,990	1,690	9,180	9,650	4,270	8,300	13,000	28,800	2,410	2,350	34,900	24,000
5	2,200	2,980	7,640	6,950	6,550	9,400	10,300	20,200	2,710	1,350	28,600	33,300
6	2,160	3,930	6,400	4,380	6,050	8,800	9,100	16,000	2,480	2,480	17,200	27,200
7	3,130	4,730	5,810	4,160	5,600	9,700	10,300	36,400	1,970	3,120	28,500	18,800
8	983	5,400	3,860	5,400	7,050	7,800	20,600	70,400	1,800	2,770	59,600	10,200
9	694	5,000	1,880	9,670	5,980	5,470	26,400	39,000	3,090	8,490	45,900	5,800
10	882	4,730	1,610	13,900	6,280	3,820	20,900	26,400	6,800	13,900	27,800	4,960
11	1,130	2,960	2,550	16,700	16,100	15,100	17,400	24,000	6,550	9,900	13,500	6,300
12	863	1,690	2,550	10,400	17,800	81,100	16,000	17,900	4,500	5,220	11,200	4,500
13	768	2,230	1,940	6,340	13,600	96,400	20,900	13,000	3,360	3,460	7,800	4,310
14	768	1,970	1,340	4,730	11,500	51,200	28,000	12,200	2,760	2,720	5,800	2,590
15	586	1,610	1,410	6,550	14,100	29,100	28,400	18,700	1,950	1,970	5,990	1,560
16	640	2,050	1,360	7,300	20,200	20,900	21,600	27,200	2,060	1,800	6,550	1,360
17	499	1,880	1,400	12,900	20,200	18,100	16,700	18,200	3,240	1,540	6,060	1,510
18	550	962	2,580	36,100	14,400	13,300	14,200	10,600	5,750	1,310	3,750	1,360
19	448	749	3,920	28,200	12,100	11,800	11,500	6,940	15,400	1,440	2,640	1,310
20	364	1,330	4,500	22,400	10,000	10,600	10,900	5,600	18,800	1,110	2,320	1,130
21	640	2,020	6,050	52,400	9,400	10,900	8,850	6,930	12,800	730	1,970	1,190
22	332	2,060	6,050	64,300	8,550	13,300	6,900	16,000	11,200	1,050	1,690	622
23	220	2,340	5,370	46,900	21,700	12,400	6,610	18,800	8,550	1,880	1,610	658
24	252	9,760	3,150	28,100	18,600	11,800	5,600	12,700	10,400	1,940	1,750	920
25	300	15,400	2,980	18,800	16,000	14,800	5,600	9,100	9,540	1,970	1,110	1,070
26	397	11,700	4,150	12,300	20,200	16,700	4,800	6,710	6,550	3,150	1,050	1,020
27	482	8,680	16,500	9,510	20,200	18,800	4,060	5,600	5,200	2,200	1,310	962
28	499	6,980	20,200	6,550	20,200	15,800	2,110	5,000	4,230	4,310	1,620	622
29	397	4,730	15,700	5,200		12,500	2,380	4,730	3,350	4,160	2,000	448
30	516	3,570	10,300	5,800		11,200	4,530	3,440	2,080	3,640	2,020	431
31	533		7,080	6,050		9,400		2,140		2,460	1,780	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	8,300	220	1,430	0.274	0.32
November	15,400	730	3,905	.749	.84
December	20,200	1,340	6,076	1.17	1.35
January	64,300	4,160	16,270	3.12	3.60
February	21,700	3,540	12,110	2.32	2.42
March	96,400	3,820	18,880	3.62	4.17
April	28,000	2,110	12,730	2.44	2.72
May	70,400	2,140	17,260	3.31	3.82
June	18,800	1,800	5,541	1.06	1.18
July	13,900	730	3,244	.622	.72
August	59,600	1,050	11,000	2.11	2.43
September	33,300	431	5,401	1.04	1.16
The year	96,400	220	9,494	1.82	24.73

South Fork of Tenmile Creek at Jefferson, Pa.

Location.- Chain gage, lat. 39°55'25", long. 80°04'25", at highway bridge 1 mile southwest of Jefferson, Greene County, and 3¼ miles downstream from mouth of Ruff Creek.
Drainage area.- 180 square miles.
Records available.- October 1931 to September 1935.
Extremes.- Maximum discharge during year, about 5,950 second-feet Feb. 23 (gage height, 10.12 feet); minimum, 0.6 second-foot July 24 (gage height, 0.12 foot).
1931-35: Maximum gage height (estimated), 12.4 feet Apr. 14, 1934 (discharge not determined); minimum discharge, 0.1 second-foot Sept. 22 to Oct. 2, 1932.
Remarks.- Records poor. Discharge estimated for periods of ice effect, Dec. 10-13, Jan. 28 to Feb. 13, and for period of questionable gage-height record, Jan. 13-16. Slight regulation at low stages from pumpage at Waynesburg.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	157	8.0	31	155	40	455	90	69	31	14	3.9	10
2	97	7.4	164	1,140	37	395	83	1,760	28	9.4	7.2	8.3
3	22	11	92	796	34	320	76	2,140	36	8.5	125	24
4	18	16	70	197	32	278	64	673	24	16	560	127
5	11	34	66	75	30	225	50	410	39	9.9	353	430
6	10	132	39	155	28	195	75	320	32	9.1	133	225
7	13	37	31	93	27	193	169	1,180	26	8.8	2,100	153
8	11	23	24	81	26	173	595	830	34	7.3	748	78
9	8.4	20	20	162	35	142	525	611	33	6.8	425	41
10	8.0	16	17	251	60	192	490	2,690	50	6.4	251	75
11	7.4	15	15	212	128	720	455	2,120	23	5.5	225	108
12	5.2	15	14	168	110	3,480	630	515	20	4.7	200	55
13	3.5	16	13	144	95	1,150	710	320	16	4.1	157	16
14	2.2	15	12	120	83	630	630	264	14	4.7	86	13
15	1.9	15	11	80	552	425	455	212	13	4.5	44	11
16	2.4	12	9.4	142	440	335	306	164	14	4.3	108	10
17	2.0	10	8.7	380	335	278	238	138	13	4.3	51	9.9
18	1.9	9.0	8.0	490	292	186	140	99	16	4.3	26	8.5
19	1.4	9.7	18	790	182	142	99	83	29	3.9	20	9.9
20	1.4	8.7	142	880	132	212	95	72	34	2.3	14	9.4
21	1.9	9.7	36	1,660	120	225	110	80	36	1.7	11	8.5
22	2.0	9.7	23	770	120	212	68	74	33	1.3	14	6.8
23	1.7	21	20	455	3,240	212	81	64	44	.9	12	4.5
24	1.5	301	14	365	1,080	225	70	53	40	1.6	7.8	4.1
25	1.7	134	32	306	880	292	63	43	30	94	7.3	3.7
26	5.2	83	86	238	710	225	56	35	22	66	7.1	3.7
27	6.0	55	266	159	595	184	46	28	16	20	30	3.3
28	7.2	32	123	100	395	170	47	25	13	11	21	3.0
29	5.8	31	162	75		138	48	24	14	6.8	25	2.8
30	5.8	44	97	55		108	81	26	16	6.4	20	2.3
31	6.2		68	45		97		32		4.5	12	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	157	1.4	13.9	0.077	0.09
November	301	7.4	38.3	.213	.24
December	266	8.0	55.9	.311	.36
January	1,660	45	346	1.92	2.21
February	3,240	26	351	1.95	2.03
March	3,480	97	394	2.19	2.52
April	710	46	222	1.23	1.37
May	2,690	24	489	2.72	3.14
June	50	13	26.3	.146	.16
July	94	.9	11.4	.063	.07
August	2,100	3.9	187	1.04	1.20
September	430	2.3	48.8	.271	.30
The year	3,480	.9	182	1.01	13.69

Youghiogheny River at Connellsville, Pa.

Location.- Water-stage recorder, lat. 40°01'05", long. 79°35'40", at Crawford Avenue Bridge, at Connellsville, Fayette County, three quarters of a mile above mouth of Mounts Creek. Zero of gage is 860.13 feet above mean sea level.
Drainage area.- 1,326 square miles.
Records available.- October 1918 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; July 1908 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 26 years (1908-18, 1919-35), 2,473 second-feet.
Extremes.- Maximum discharge during year, 25,000 second-feet Jan. 22 (gage height, 10.83 feet); minimum, 223 second-feet Oct. 23 (gage height, 0.97 foot); minimum daily discharge, 268 second-feet Sept. 27.
1908-35: Maximum discharge, about 84,000 second-feet Mar. 29, 1924 (gage height, 19.4 feet, revised); minimum, 11 second-feet Sept. 23, 26, 27, 1908, Oct. 18, 1910 (gage height, 0.11 foot).
Remarks.- Records excellent except those estimated for periods of missing gage-height record, Oct. 17-21, Dec. 11-13, Jan. 24 to Feb. 1, and for period of ice effect, Feb. 2-13, which are fair. Regulation from operation of hydroelectric plants upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,660	831	3,250	5,800	1,300	4,040	1,770	2,160	1,050	730	400	398
2	1,820	1,360	4,090	6,090	1,400	3,750	1,770	6,770	830	809	11,300	373
3	1,160	1,380	3,190	3,940	1,550	4,890	1,590	15,800	643	863	18,500	556
4	872	1,580	2,810	3,110	1,400	5,780	1,420	8,800	1,020	740	12,200	2,330
5	708	2,490	2,450	2,230	1,200	4,830	1,340	5,780	1,260	500	5,640	6,420
6	674	2,220	1,990	2,020	1,150	4,830	1,710	4,930	1,710	620	3,560	4,300
7	876	2,500	1,760	1,960	820	4,530	2,300	14,700	980	953	10,400	2,500
8	734	1,980	1,500	2,020	930	4,040	2,230	12,700	1,010	1,170	8,420	1,650
9	679	1,540	1,380	5,080	1,800	3,020	2,440	7,610	2,150	2,720	4,840	1,280
10	572	1,290	1,170	7,370	4,000	2,680	2,940	8,710	2,060	1,660	3,290	1,260
11	449	1,210	900	5,780	3,600	6,900	5,460	8,240	1,600	1,370	2,850	1,520
12	440	1,020	650	4,230	2,650	14,400	6,440	5,350	1,430	1,120	2,160	1,160
13	514	1,040	1,200	3,290	2,350	11,600	8,630	4,430	1,250	908	1,770	908
14	482	1,050	1,050	3,750	2,680	7,370	7,860	4,230	1,120	884	2,820	924
15	460	930	1,060	3,380	4,880	5,560	6,220	3,660	1,070	550	2,250	882
16	444	821	982	2,850	9,010	6,000	5,560	2,940	945	718	1,590	574
17	420	998	1,040	4,310	6,670	5,040	4,530	2,440	917	751	1,240	532
18	400	1,200	1,010	7,610	5,040	3,940	4,130	2,090	1,210	667	1,020	518
19	390	1,110	1,070	5,350	3,940	3,380	3,660	1,770	1,750	643	880	472
20	430	1,050	1,740	4,730	3,200	3,470	3,200	1,590	1,550	586	816	560
21	520	960	1,980	10,900	2,520	3,290	2,520	1,830	1,410	420	876	888
22	416	878	1,840	21,800	2,370	4,130	2,230	2,410	1,500	901	832	747
23	329	1,570	1,450	12,200	2,440	3,660	2,160	2,090	2,110	974	830	504
24	358	7,130	1,380	7,000	2,090	4,630	2,020	1,960	1,710	784	659	440
25	334	4,680	1,380	5,000	2,840	4,040	1,830	1,710	1,570	902	558	352
26	446	3,100	4,060	3,400	8,720	3,750	1,650	1,230	1,360	2,910	439	329
27	765	2,370	7,290	2,500	7,160	3,200	1,480	1,040	1,180	1,480	526	268
28	832	1,980	4,440	2,000	4,530	2,760	1,210	1,280	1,120	1,030	772	334
29	702	1,980	3,640	1,600		2,680	1,140	1,320	950	776	726	520
30	648	2,930	3,850	1,500		2,300	1,840	1,350	873	580	580	406
31	652		2,740	1,400		1,900		890		429	472	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,660	329	716	0.540	0.62
November	7,130	821	1,839	1.39	1.55
December	7,290	650	2,205	1.66	1.91
January	21,800	1,400	4,974	3.75	4.32
February	9,010	820	3,294	2.48	2.58
March	14,400	1,900	4,722	3.56	4.10
April	8,630	1,140	3,109	2.34	2.61
May	15,800	890	4,575	3.45	3.98
June	2,150	643	1,311	.989	1.10
July	2,910	420	973	.734	.85
August	18,500	400	3,330	2.51	2.89
September	6,420	268	1,130	.852	.95
The year	21,800	268	2,686	2.03	27.44

Youghiogheny River at Sutersville, Pa.

Location.- Wire-weight gage, lat. 40°14'25", long. 79°48'20", at highway bridge at Sutersville, Westmoreland County, 2¼ miles below mouth of Sewickley Creek. Zero of gage is 733.14 feet above mean sea level. Prior to Oct. 9, 1934, chain gage at same site and datum.
Drainage area.- 1,715 square miles.
Records available.- October 1931 to September 1935 in reports of U. S. Geological Survey; June 1915 to September 1929, June 1931 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 13 years (1920-29, 1931-35), 2,869 second-feet.
Extremes.- Maximum discharge during year 35,000 second-feet Jan. 22 (gage height, 15.3 feet, from graph based on gage readings); minimum, 394 second-feet Sept. 27, 28 (gage height, 2.70 feet).
1915-29, 1931-35: Maximum discharge, 89,300 second-feet (revised) Mar. 30, 1924 (gage height, 28.3 feet, revised); minimum gage height, 1.96 feet July 10, 1918 (discharge not determined).
Remarks.- Records fair except those estimated for period of ice effect, Jan. 26 to Feb. 14, which are poor. Diurnal regulation from operation at hydro-electric plants upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,340	885	3,490	5,960	1,600	5,000	2,400	2,570	1,060	1,060	554	554
2	2,910	1,380	4,710	8,320	1,700	4,770	2,240	4,250	1,200	800	11,800	496
3	1,900	1,560	3,890	5,130	1,850	5,470	2,080	21,600	1,160	968	24,350	525
4	1,320	1,560	3,290	4,090	1,700	6,730	1,930	12,600	923	1,110	18,300	1,350
5	1,020	2,910	2,910	3,100	1,450	5,710	1,790	7,550	1,540	923	8,180	6,080
6	930	2,730	2,550	2,380	1,400	5,230	1,930	5,710	1,420	554	4,330	5,380
7	1,020	2,910	2,210	2,210	1,000	5,230	2,570	15,700	1,260	839	11,300	3,100
8	1,220	2,730	1,900	2,380	1,150	4,770	2,740	19,500	1,200	1,160	12,000	1,930
9	885	2,050	1,630	3,650	2,150	3,900	3,100	10,500	1,540	3,240	6,210	1,660
10	802	1,700	1,560	7,900	4,800	3,110	3,290	10,800	2,570	2,410	3,900	1,540
11	656	1,500	1,380	6,660	4,350	7,840	5,000	11,400	2,080	1,540	3,290	1,660
12	562	1,380	726	5,130	3,200	21,000	6,730	7,270	1,660	1,360	2,740	1,420
13	533	1,270	1,380	3,890	2,850	18,300	10,200	5,470	1,420	1,260	2,080	1,110
14	656	1,270	1,500	3,890	3,650	10,500	10,500	5,230	1,420	1,110	2,080	1,060
15	592	1,170	1,170	4,090	7,550	7,000	7,550	4,550	1,200	1,010	3,100	1,060
16	533	1,070	1,440	3,490	11,400	6,730	6,730	3,690	1,260	586	2,080	968
17	533	975	1,220	4,310	7,830	6,210	5,470	3,100	1,160	923	1,660	554
18	479	1,270	1,270	8,100	5,960	5,000	4,550	2,740	1,110	881	1,310	617
19	454	1,500	1,320	6,660	4,550	4,110	4,110	2,400	1,660	800	1,200	586
20	479	1,220	1,500	5,130	3,900	4,110	3,900	2,080	1,790	760	839	586
21	624	1,170	2,550	10,000	3,100	4,110	3,100	2,080	1,660	617	1,010	686
22	562	1,070	2,050	27,900	2,920	4,770	2,740	2,570	1,540	686	1,110	1,060
23	479	1,170	1,830	17,600	5,230	4,330	2,570	2,400	2,240	1,060	1,060	839
24	479	6,840	1,760	9,600	3,690	6,210	2,400	2,240	2,080	923	881	586
25	454	5,790	1,630	6,210	4,770	5,230	2,080	2,080	1,790	1,060	617	496
26	533	3,890	1,980	4,700	13,000	4,550	1,930	1,660	1,660	2,900	586	470
27	656	3,100	7,230	3,000	11,600	4,110	1,790	1,540	1,310	2,220	554	418
28	1,070	2,550	5,340	2,400	6,470	3,690	1,660	1,310	1,310	1,420	760	394
29	1,120	2,380	4,090	1,900		3,490	1,540	1,540	1,200	1,060	923	443
30	764	2,910	4,290	1,800		3,100	1,660	1,540	1,010	839	839	617
31	726		3,490	1,700		2,570		1,420		652	617	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	5,340	454	977	0.570	0.66
November	6,840	885	2,130	1.24	1.38
December	7,230	726	2,493	1.45	1.67
January	27,900	1,700	5,912	3.45	3.98
February	13,000	1,000	4,458	2.60	2.71
March	21,000	2,570	6,028	3.51	4.05
April	10,500	1,540	3,676	2.14	2.39
May	21,600	1,310	5,777	3.37	3.88
June	2,570	923	1,481	.864	.96
July	3,240	554	1,185	.691	.80
August	24,350	554	4,202	2.45	2.82
September	6,080	394	1,275	.743	.83
The year	27,900	394	3,303	1.93	26.13

Casselman River at Markleton, Pa.

Location.- Chain gage, lat. 39°51'35", long. 79°13'40", at highway bridge at Markleton, Somerset County, 2 miles southwest of Casselman and 7 miles below mouth of Coxes Creek.
Drainage area.- 382 square miles.
Records available.- August to September 1913, October 1920 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; August 1913 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 15 years (1920-35), 605 second-feet.
Extremes.- Maximum discharge during year, 8,220 second-feet Jan. 22 (gage height, 7.6 feet, from graph based on gage readings); minimum, 52 second-feet Oct. 23 (gage height, 1.90 feet).
1913-35: Maximum discharge, 21,500 second-feet Mar. 29, 1924 (gage height, 12.17 feet); 11 second-feet Aug. 13, 1930 (gage height, 1.52 feet).
Remarks.- Records good except those estimated for periods of ice effect, Dec. 12-15, Jan. 29 to Feb. 7, which are fair. Slight regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	580	305	1,320	866	290	866	485	411	173	128	77	83
2	295	348	1,220	751	310	988	456	2,790	160	130	3,060	116
3	173	314	905	716	330	1,800	405	4,320	151	103	4,090	386
4	151	456	826	612	240	1,730	363	2,180	183	89	2,780	1,220
5	136	612	646	411	210	1,420	338	1,370	190	94	1,100	1,680
6	128	612	516	456	190	1,540	680	1,370	151	112	646	751
7	177	547	485	547	185	1,370	612	4,530	133	176	2,500	485
8	148	400	395	646	295	1,170	547	3,200	136	502	1,370	348
9	117	305	358	2,420	716	866	580	1,870	638	389	866	286
10	100	264	286	2,530	1,080	826	788	3,200	353	235	646	323
11	78	264	201	1,600	680	2,250	1,600	2,180	220	151	788	260
12	76	252	190	1,080	547	3,480	1,870	1,540	177	117	516	201
13	76	235	180	866	612	2,350	2,180	1,320	148	103	378	163
14	69	252	185	1,120	680	1,600	1,540	1,270	130	85	988	151
15	69	187	200	866	2,450	1,320	1,270	946	120	76	456	128
16	69	216	269	751	3,400	1,660	1,080	788	133	66	338	120
17	66	264	348	826	2,180	1,220	946	680	151	62	277	110
18	66	286	348	1,480	1,370	946	946	547	183	60	216	98
19	61	286	338	905	1,170	826	788	485	363	66	183	142
20	62	256	485	866	905	866	680	427	389	61	166	239
21	61	231	485	3,250	646	946	612	456	318	312	157	205
22	58	212	363	6,550	680	1,030	547	547	516	277	248	123
23	54	743	314	2,900	612	905	485	416	427	139	160	110
24	56	2,040	282	1,420	516	1,370	427	368	328	96	130	98
25	56	988	295	1,270	716	1,120	389	333	260	309	105	83
26	96	716	1,750	1,080	2,600	988	343	291	231	269	94	78
27	142	580	1,370	788	1,420	788	314	260	187	295	142	76
28	252	547	988	516	788	716	309	231	166	166	216	74
29	151	826	1,030	420		680	286	224	154	123	154	71
30	177	1,080	946	350		580	384	239	139	87	110	67
31	142		547	320		485		205		72	96	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	580	54	127	0.332	0.38
November	2,040	187	487	1.27	1.42
December	1,750	180	583	1.53	1.76
January	6,550	320	1,264	3.31	3.82
February	3,400	185	922	2.41	2.51
March	3,480	485	1,248	3.27	3.77
April	2,180	286	742	1.94	2.16
May	4,530	205	1,258	3.29	3.79
June	638	120	234	.613	.68
July	502	60	160	.419	.48
August	4,090	77	744	1.95	2.25
September	1,680	67	276	.723	.81
The year	6,550	54	670	1.75	23.83

Big Piney Run near Salisbury, Pa.

Location.- Water-stage recorder, lat. 39°43'30", long 79°02'35", an eighth of a mile above Little Piney Run, a quarter of a mile north of Maryland - Pennsylvania State line, and 2½ miles southeast of Salisbury, Somerset County.
Drainage area.- 24.5 square miles.
Records available.- June 1932 to September 1935.
Extremes.- Maximum discharge during year, 494 second-feet Feb. 15 (gage height, 4.05 feet); minimum, 1.1 second-feet Aug. 1 (gage height, 1.17 feet).
1932-35: Maximum discharge, about 1,910 second-feet (revised) Mar. 14, 1933 (gage height, 6.1 feet); minimum 0.25 second-foot Sept 13, 20-22, 1932.
Minima do not include about 0.1 second-foot diverted above gage.
Remarks.- Records excellent except those estimated for periods of ice effect, Dec. 31, Jan. 2, 4, which are fair. Water supply for city of Frostburg diverted 3 miles above gage not included in records except in part of monthly table.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	9.7	102	56	20	63	27	16	9.4	19	1.5	6.6
2	28	9.0	86	40	21	63	24	163	8.4	17	40	24
3	20	6.8	65	38	22	116	22	211	7.7	10	164	32
4	14	18	53	25	18	122	19	141	9.4	8.7	100	145
5	11	18	38	22	16	122	19	104	7.7	15	47	133
6	18	17	30	24	14	143	48	98	6.6	15	31	77
7	14	15	25	29	13	127	38	191	5.8	15	69	47
8	9.4	12	19	45	13	90	42	159	15	13	50	33
9	7.7	10	18	157	39	62	43	112	28	18	41	27
10	6.3	9.4	16	146	53	62	63	243	12	11	46	25
11	5.3	9.0	15	106	38	96	136	143	8.7	8.7	72	18
12	6.3	8.0	15	73	34	115	224	98	7.4	6.8	44	14
13	6.6	8.0	12	59	35	101	198	79	6.6	7.1	32	12
14	5.5	8.0	11	57	35	82	139	69	5.5	6.0	25	10
15	6.3	7.2	8.7	46	212	91	102	50	6.3	5.8	19	8.7
16	5.0	6.6	10	38	219	96	79	40	6.6	6.8	16	7.7
17	4.4	8.0	13	59	159	83	65	35	6.0	5.5	12	6.8
18	4.4	8.4	9.0	72	107	64	56	29	34	5.0	10	8.2
19	5.0	7.4	8.0	54	81	55	46	25	34	4.2	13	8.7
20	3.8	7.1	12	65	62	49	40	22	55	3.8	14	13
21	3.2	7.1	12	176	52	57	36	45	39	4.2	15	9.0
22	3.1	6.3	10	319	42	48	32	30	56	4.8	14	7.1
23	4.0	7.2	9.4	168	35	55	27	27	43	3.8	11	5.5
24	4.0	82	9.4	101	35	59	24	10	35	3.4	10	5.3
25	4.2	54	11	77	68	57	20	22	28	5.5	8.7	4.2
26	7.8	38	92	59	134	52	18	19	22	7.8	8.7	4.0
27	6.0	32	102	44	92	43	16	17	19	6.3	16	4.4
28	6.8	32	69	38	73	41	15	15	16	3.6	15	4.6
29	6.3	68	88	35		36	14	13	13	2.9	9.7	4.0
30	8.0	82	68	27		30	20	13	12	1.8	8.0	4.0
31	6.6		50	25		27		11		1.6	6.6	

Month	Observed				Corrected for diversion		
	Maximum	Minimum	Mean		Mean	Per square mile	Run-off in inches
October	45	3.1	9.23		9.46	0.386	0.44
November	82	6.3	20.4		20.7	.845	.94
December	102	8.0	35.0		35.1	1.43	1.65
January	319	22	73.5		73.6	3.00	3.46
February	219	13	62.2		62.3	2.54	2.64
March	143	27	74.4		74.4	3.04	3.50
April	224	14	55.1		55.1	2.25	2.51
May	243	10	72.6		72.7	2.97	3.42
June	56	5.5	18.8		19.0	.776	.87
July	19	1.6	7.97		8.14	.332	.38
August	164	1.5	31.3		31.4	1.28	1.48
September	145	4.0	23.6		23.7	.967	1.08
The year	319	1.5	40.3		40.4	1.65	22.37

Laurel Hill Creek at Ursina, Pa.

Location.- Chain gage, lat. 39°48'55", long. 79°19'40", at highway bridge at Ursina, Somerset County, 2 miles above mouth.
Drainage area.- 121 square miles.
Records available.- August to September 1913, October 1918 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; August 1913 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 19 years (1916-35), 274 second-feet.
Extremes.- Maximum discharge during year, 4,190 second-feet Aug. 2 (gage height, 6.86 feet); minimum, 12 second-feet July 21 (gage height, 1.71 feet); minimum daily discharge, 14 second-feet July 20.
1913-35: Maximum discharge, 8,260 second-feet (revised) Mar. 29, 1924 (gage height, 9.30 feet); no flow Aug. 22, 1917, Feb. 15, 1919; minimum daily discharge observed, 1 second-foot Aug. 22, Sept. 1, 1917.
Remarks.- Records good except those for low stages and those estimated for periods of ice effect, Dec. 11-15, Jan. 28 to Feb.9, which are fair. Some regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	360	238	423	1,240	160	402	189	181	55	34	84	34
2	189	243	451	870	150	370	170	1,670	55	21	2,040	43
3	136	170	330	642	160	772	154	1,900	43	24	2,000	72
4	107	395	350	412	145	870	143	1,080	75	22	1,380	316
5	83	485	292	292	135	772	139	610	77	29	724	491
6	83	642	252	292	130	905	193	474	47	45	536	355
7	83	515	214	243	125	905	154	1,550	43	39	1,460	107
8	63	350	193	265	190	708	170	1,140	79	31	910	80
9	49	287	189	826	280	545	189	708	391	201	462	69
10	45	209	177	940	428	426	209	772	174	147	355	100
11	43	185	160	772	325	1,290	451	708	158	55	283	66
12	43	174	150	474	311	2,170	485	485	107	35	214	49
13	37	158	145	386	311	1,300	940	446	72	49	196	41
14	32	143	150	578	340	805	740	428	61	37	876	37
15	31	139	160	407	837	578	578	355	66	29	278	35
16	32	132	189	340	1,120	642	485	283	66	37	189	31
17	31	132	218	606	772	485	412	247	55	28	154	31
18	28	117	189	578	545	386	407	234	110	19	147	34
19	32	181	189	396	386	603	375	193	69	16	107	34
20	27	170	407	428	335	388	287	174	107	14	77	39
21	28	147	306	1,160	297	407	243	162	107	19	75	53
22	29	147	234	2,180	274	451	218	139	150	75	77	37
23	27	604	174	1,080	193	439	197	139	110	83	80	31
24	25	870	181	642	234	675	174	121	83	43	55	28
25	22	545	154	439	300	545	147	110	75	266	47	25
26	72	355	686	428	1,040	417	121	90	55	390	39	22
27	97	311	756	297	774	355	124	83	51	193	63	21
28	124	226	456	230	439	350	136	69	45	154	83	21
29	103	238	468	210		297	121	69	43	97	49	22
30	114	320	474	190		214	238	103	39	69	39	21
31	110		360	170		205		72		63	31	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	360	22	73.7	0.609	0.70
November	870	117	294	2.43	2.71
December	756	145	293	2.42	2.79
January	2,180	170	581	4.80	5.53
February	1,120	125	383	3.17	3.30
March	2,170	205	635	5.25	6.05
April	940	121	286	2.36	2.63
May	1,900	69	477	3.94	4.54
June	391	39	88.9	.735	.82
July	390	14	76.3	.631	.73
August	2,040	31	416	3.44	3.97
September	491	21	78.2	.646	.78
The year	2,180	14	308	2.55	34.49

Turtle Creek at Trafford, Pa.

Location.- Chain gage, lat. 40°23'20", long. 79°45'05", at highway bridge at Blackburn railroad station, half a mile northeast of Trafford, Westmoreland County, 1¼ miles above mouth of Brush Creek, and 7 miles above confluence with Monongahela River.
Drainage area.- 54.8 square miles.
Records available.- October 1920 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; July 1914 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 15 years (1920-35), 78.0 second-feet.
Extremes.- Maximum discharge during year (estimated), 3,220 second-feet Aug. 3 (gage height, 6.98 feet); minimum, 1.5 second-feet July 18, 19 (gage height, 0.24 foot).
1914-35: Maximum gage height (estimated), 8.5 feet Mar. 15, 1933 (discharge not determined); minimum discharge, 0.1 second-foot Oct. 6, 7, 1922 (gage height, 0.10 foot).
Remarks.- Records fair except those for high stages and those estimated for periods of ice effect, Dec. 9-23, Jan. 28 to Feb. 13, which are poor. Some regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	172	9.5	72	401	36	159	60	29	19	6.9	2.7	5.3
2	104	10	63	159	35	320	55	280	16	4.8	107	3.8
3	70	10	54	113	34	303	49	303	23	4.1	1,130	5.3
4	54	32	48	70	34	226	46	159	55	3.2	347	37
5	41	28	40	64	33	184	44	113	23	4.3	81	25
6	38	39	35	67	33	136	46	115	21	4.3	55	14
7	35	34	31	55	34	134	40	554	18	4.8	132	9.0
8	28	29	29	58	36	109	54	287	18	3.4	96	5.9
9	23	23	26	126	55	81	73	172	20	4.1	56	6.9
10	22	21	23	126	45	110	61	496	16	3.6	43	11
11	20	19	21	96	38	514	55	211	13	3.6	35	7.4
12	18	17	19	72	37	866	82	159	13	3.4	25	5.3
13	16	17	18	61	36	336	290	130	12	2.9	23	4.9
14	14	20	17	72	84	226	184	107	10	2.0	19	4.3
15	14	9.5	17	55	283	159	134	86	10	1.9	17	3.4
16	13	19	25	65	211	136	102	68	10	1.9	34	2.7
17	12	15	23	301	159	113	84	59	12	1.8	22	2.9
18	11	15	22	198	109	91	73	51	16	1.6	15	7.4
19	10	16	25	119	93	134	59	47	47	1.6	11	3.8
20	9.5	24	65	436	72	134	54	42	27	2.5	9.5	22
21	9.0	22	55	544	56	347	47	41	20	2.0	17	5.9
22	9.0	22	45	336	73	211	41	35	107	20	14	4.3
23	9.0	170	35	211	366	211	38	33	66	5.9	10	3.4
24	9.5	73	28	132	211	226	34	30	40	7.4	7.4	2.9
25	9.0	100	40	106	382	159	31	27	26	4.8	5.3	2.9
26	28	72	113	96	823	130	30	24	22	3.8	4.8	2.9
27	15	55	93	64	287	109	28	26	17	2.9	7.4	2.5
28	28	47	78	53	198	106	29	24	15	2.7	6.9	3.2
29	17	51	74	45		88	27	34	13	4.1	4.3	3.8
30	14	50	54	40		76	43	26	10	3.2	4.3	2.9
31	12		72	37		67		22		3.2	6.9	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	172	9.0	28.5	0.520	0.60
November	170	9.5	35.6	.650	.73
December	113	17	43.9	.801	.92
January	544	37	141	2.57	2.96
February	823	33	139	2.54	2.64
March	866	67	200	3.65	4.21
April	290	27	66.4	1.21	1.35
May	554	22	122	2.23	2.57
June	107	10	24.5	.447	.50
July	20	1.6	4.09	.075	.09
August	1,130	2.7	75.8	1.38	1.59
September	37	2.5	7.40	.135	.15
The year	1,130	1.6	74.0	1.35	18.31

Beaver river at Wampum, Pa.

Location.- Staff gage, lat. 40°53'15", long. 80°20'05", at highway bridge at Wampum, Lawrence County.
Drainage area.- 2,235 square miles.
Records available.- June to September 1914, August 1932 to September 1935.
Extremes.- Maximum discharge during year, 13,900 second-feet Aug. 3 (gage height, 10.5 feet, from graph based on gage readings); minimum, 205 second-feet June 17 (gage height, 2.10 feet).
1914, 1932-35: Maximum discharge, about 30,800 second-feet Mar. 15, 1933 (gage height, 16.06 feet); minimum, 74 second-feet July 30, 1933 (gage height, 1.70 feet); minimum daily discharge, 97 second-feet July 22, Aug. 23, 1933.
Remarks.- Records fair. Regulation from storage in Milton and Pymatuning Reservoirs and from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,640	435	2,640	1,240	615	3,600	830	501	304	273	878	367
2	1,130	406	3,150	975	575	5,760	830	1,250	299	241	1,190	367
3	785	367	2,860	925	575	6,220	740	2,320	281	237	11,400	357
4	538	575	2,060	740	615	6,800	740	4,750	435	234	8,620	435
5	435	957	1,640	501	615	5,640	698	3,920	406	241	5,460	575
6	377	1,760	1,130	538	785	6,600	698	3,000	406	234	5,460	435
7	346	1,240	925	615	785	5,830	698	7,790	357	234	7,800	377
8	299	925	830	740	830	5,460	785	9,420	357	234	6,210	367
9	290	830	698	2,610	1,130	4,410	925	6,600	304	286	5,850	336
10	273	655	615	5,100	1,350	3,920	925	7,400	290	241	4,240	468
11	249	615	575	4,410	1,350	4,840	830	5,640	304	234	2,860	435
12	273	575	501	3,300	1,240	11,200	925	3,600	286	223	2,190	406
13	273	615	575	2,720	1,080	9,630	1,350	3,000	273	261	1,820	377
14	253	740	501	2,320	1,150	6,020	1,350	3,150	257	234	1,460	367
15	249	830	435	1,820	4,820	4,580	1,350	2,580	241	219	1,240	326
16	249	925	468	1,260	8,600	3,920	1,130	1,940	219	336	3,260	281
17	253	878	538	1,920	7,400	3,300	1,020	1,300	205	304	5,460	281
18	241	975	655	3,150	5,850	2,720	878	1,020	468	241	3,170	286
19	245	1,020	740	2,580	3,600	2,320	830	878	655	223	1,940	281
20	237	1,300	1,140	4,070	3,150	2,190	740	740	468	219	1,350	655
21	257	1,350	1,820	9,150	2,450	2,320	655	655	538	216	1,820	377
22	281	1,080	1,700	12,400	1,820	2,450	575	575	925	212	2,670	367
23	273	1,080	1,460	9,750	1,640	2,450	538	501	1,240	308	1,460	299
24	257	1,520	1,520	5,220	1,640	2,320	501	501	1,240	488	975	286
25	269	1,350	1,580	3,300	2,620	1,820	468	468	878	2,980	698	281
26	304	1,130	1,760	2,860	8,600	1,580	435	435	615	3,310	575	273
27	367	878	2,190	1,940	7,800	1,350	406	406	468	1,780	501	273
28	468	785	1,820	1,580	5,100	1,180	435	406	1,010	1,060	501	377
29	468	740	1,580	1,150		1,130	468	377	925	767	435	352
30	468	1,000	1,460	1,020		1,080	501	372	468	975	406	336
31	435		1,350	740		975		336		740	377	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,640	237	403	0.180	0.21
November	1,760	367	918	.411	.46
December	3,150	435	1,320	.591	.68
January	12,400	501	2,920	1.31	1.51
February	8,600	575	2,777	1.24	1.29
March	11,200	975	3,923	1.76	2.03
April	1,350	406	775	.347	.39
May	9,420	336	2,446	1.09	1.26
June	1,240	205	504	.226	.25
July	3,310	212	573	.256	.30
August	11,400	377	2,976	1.33	1.53
September	655	273	367	.164	.18
The year	12,400	205	1,660	.743	10.09

Pymatuning Reservoir at Pymatuning Dam, Pa.

Location.- Water-stage recorder, lat. 41°30'00", long. 80°27'35", in gate house at Pymatuning Dam, Crawford County, 1 3/4 miles northwest of Jamestown. Zero of gage is at mean sea level.
Drainage area.- 158 square miles.
Records available.- October 1933 to September 1935.
Extremes.- Maximum water-surface elevation during year, 1,004.38 feet May 21; minimum, 994.46 feet Oct. 20, 25.
1933-35: Maximum water-surface elevation, that of May 21, 1935; minimum, 975.70 feet Oct. 15, 16, 19, 1933.
Remarks.- Records excellent. Reservoir used to regulate flow in Shenango River. Elevation of spillway is 1,008.0 feet. Total capacity of reservoir is 8,640,000,000 cubic feet.

Daily mean gage height, in feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	994.75	994.63	996.25	997.86	999.95	1001.41	1003.32	1003.51	1004.16	1004.12	1003.76	1003.56
2	994.73	994.66	996.49	997.87	999.96	1001.45	1003.33	1003.54	1004.06	1004.06	1003.76	1003.54
3	994.74	994.60	996.49	997.90	999.98	1001.62	1003.34	1003.56	1004.05	1004.02	1003.82	1003.48
4	994.76	994.63	996.57	997.92	999.99	1001.72	1003.35	1003.62	1004.11	1004.01	1003.80	1003.53
5	994.71	994.81	996.63	997.92	1000.01	1001.83	1003.35	1003.61	1004.09	1004.03	1003.80	1003.56
6	994.70	994.84	996.68	997.94	1000.03	1001.97	1003.36	1003.65	1004.07	1004.00	1003.77	1003.57
7	994.68	994.87	996.75	997.99	1000.04	1002.07	1003.30	1003.77	1004.10	1004.03	1003.81	1003.52
8	994.71	994.92	996.76	998.10	1000.06	1002.15	1003.30	1003.81	1004.11	1004.05	1003.82	1003.52
9	994.72	994.92	996.79	998.39	1000.09	1002.18	1003.35	1003.86	1004.12	1004.03	1003.81	1003.60
10	994.69	994.96	996.81	998.57	1000.09	1002.22	1003.34	1004.09	1004.10	1004.00	1003.79	1003.62
11	994.68	995.06	996.85	998.67	1000.11	1002.36	1003.26	1004.14	1004.09	1003.97	1003.80	1003.56
12	994.66	995.09	996.85	998.72	1000.12	1002.58	1003.35	1004.15	1004.09	1003.95	1003.74	1003.56
13	994.62	995.11	996.87	998.75	1000.14	1002.66	1003.47	1004.17	1004.06	1003.99	1003.80	1003.56
14	994.57	995.24	996.88	998.84	1000.18	1002.72	1003.41	1004.26	1004.01	1003.97	1003.79	1003.51
15	994.56	995.18	996.89	998.83	1000.40	1002.76	1003.40	1004.28	1004.06	1003.94	1003.77	1003.59
16	994.54	995.23	996.92	998.86	1000.63	1002.78	1003.47	1004.24	1004.02	1003.93	1003.82	1003.53
17	994.48	995.28	997.00	998.92	1000.73	1002.85	1003.48	1004.26	1004.00	1003.89	1003.80	1003.47
18	994.58	995.32	997.05	998.99	1000.78	1002.87	1003.47	1004.25	1004.04	1003.84	1003.77	1003.47
19	994.52	995.36	997.12	998.98	1000.83	1002.88	1003.47	1004.23	1003.99	1003.83	1003.76	1003.46
20	994.48	995.43	997.24	999.08	1000.88	1002.95	1003.50	1004.22	1003.98	1003.81	1003.72	1003.47
21	994.48	995.42	997.32	999.37	1000.90	1003.03	1003.50	1004.25	1004.05	1003.78	1003.77	1003.46
22	994.52	995.43	997.37	999.66	1000.96	1003.07	1003.50	1004.22	1004.16	1003.75	1003.78	1003.46
23	994.52	995.67	997.40	999.74	1001.02	1003.16	1003.47	1004.22	1004.17	1003.76	1003.76	1003.45
24	994.49	995.77	997.46	999.79	1001.04	1003.24	1003.48	1004.21	1004.19	1003.80	1003.72	1003.39
25	994.48	995.78	997.52	999.81	1001.09	1003.28	1003.49	1004.18	1004.15	1003.84	1003.68	1003.35
26	994.60	995.61	997.60	999.87	1001.25	1003.27	1003.46	1004.17	1004.11	1003.86	1003.66	1003.32
27	994.54	995.77	997.67	999.89	1001.34	1003.23	1003.41	1004.12	1004.14	1003.84	1003.63	1003.43
28	994.70	995.74	997.70	999.90	1001.38	1003.29	1003.48	1004.10	1004.13	1003.83	1003.66	1003.42
29	994.56	995.97	997.75	999.92		1003.20	1003.48	1004.17	1004.16	1003.87	1003.64	1003.43
30	994.62	996.03	997.80	999.93		1003.30	1003.53	1004.17	1004.13	1003.77	1003.63	1003.26
31	994.58		997.83	999.93		1003.30		1004.19		1003.79	1003.57	

Shenango River at Pymatuning Dam, Pa.

Location.- Water-stage recorder, lat. 41°29'55", long. 80°27'30", 500 feet below mouth of Sugar Run, 550 feet below Pymatuning Dam, Crawford County, and 1¼ miles northwest of Jamestown. Zero of gage is 970.00 feet above mean sea level.
Drainage area.- 167 square miles.
Records available.- June 1934 to September 1935.
Extremes.- Maximum discharge during year, 516 second-feet Aug. 15 (gage height, 5.74 feet); minimum, 1.4 second-feet Sept. 22, 23 (gage height, 3.36 feet).
1934-35: Maximum discharge, that of Aug. 15, 1935; minimum, 0.4 second-foot July 2, 3, 1934 (gage height, 3.27 feet).
Remarks.- Records excellent except those estimated for periods of ice effect, Dec. 8-15, Jan. 29 to Feb. 14, which are fair. Regulation from storage in Pymatuning Reservoir. Corrections for storage not included in records except in part of monthly table. Figures with minus sign indicate the amount by which evaporation and seepage from reservoir exceeded the natural flow.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.6	3.8	84	6.0	3.3	9.6	4.8	5.0	2.0	18.5	32	39
2	3.5	4.2	18.5	5.5	3.2	64	4.8	5.0	1.9	18.5	60	39
3	3.0	4.2	9.8	5.3	3.1	55	4.6	8.4	2.2	17.9	35	26
4	2.6	10.8	8.6	4.8	3.0	25	4.3	9.2	2.9	17.9	2.8	13.3
5	2.4	8.5	7.3	4.2	3.0	40	4.0	7.0	2.5	18.5	1.9	2.2
6	2.2	5.7	6.4	5.7	2.9	34	4.2	8.6	2.3	26	17.9	2.2
7	2.0	5.0	5.8	10.4	2.8	24	3.9	47	2.4	26	23	59
8	29	4.5	5.3	33	2.8	15.4	4.0	17.6	2.8	26	3.6	73
9	55	4.8	5.0	82	4.8	9.6	4.5	14.0	2.4	26	2.8	57
10	55	4.3	4.6	36	6.5	13.4	4.3	20	2.0	26	2.2	49
11	55	5.1	4.2	14.9	5.2	60	4.0	8.3	1.8	26	2.0	42
12	46	5.8	4.0	9.0	4.1	63	5.4	6.2	1.7	33	16.4	2.2
13	29	6.8	3.9	8.0	3.9	17.1	8.6	6.6	6.1	33	56	1.8
14	29	7.0	3.8	8.6	12	14.9	6.8	6.0	12.5	33	75	20
15	29	6.0	3.8	7.2	120	13.0	5.7	5.3	18.6	33	123	39
16	29	7.0	6.9	6.2	40	10.9	5.7	4.5	22	34	107	58
17	29	9.8	12.0	11.5	15.0	9.1	5.8	4.2	18.2	34	13.8	71
18	29	8.1	8.4	10.4	9.8	7.9	6.2	3.8	13.0	58	6.4	71
19	29	9.4	15.3	6.5	10.1	9.2	5.0	3.5	12.6	77	3.8	59
20	29	9.5	19.8	36	9.8	10.6	4.3	3.3	3.1	77	2.9	22
21	29	6.6	12.6	110	7.8	16.8	3.8	3.3	3.2	77	48	1.6
22	16.6	5.2	10.6	34	7.6	10.0	3.5	3.0	6.2	77	37	1.5
23	2.2	23	10.0	12.0	7.3	9.1	3.5	3.0	4.6	58	2.2	45
24	1.9	12.0	13.0	8.2	7.9	8.6	3.3	2.9	3.1	35	1.9	75
25	2.0	7.3	9.6	6.2	18.2	7.3	4.6	2.8	2.5	18.8	1.6	75
26	2.8	5.7	21	5.5	47	6.4	3.6	2.6	2.0	4.8	27	75
27	3.6	5.2	11.6	4.6	28	5.7	2.8	2.5	1.8	2.4	60	64
28	5.7	5.0	8.1	4.2	12.9	6.0	3.0	2.4	1.7	2.2	40	35
29	3.9	14.8	18.2	3.9		7.2	3.4	2.5	18.0	1.8	62	38
30	3.5	16.3	11.1	3.7		5.0	5.4	2.6	18.5	17.0	75	64
31	3.1		6.2	3.5		4.8		2.5		30	55	

Month	Observed			Storage	Corrected for storage		
	Maximum	Minimum	Mean	(Mean)	Mean	Per square mile	Run-off in inches
October	55	1.9	18.3	-21.3	-3.0	-0.018	-0.02
November	23	3.8	7.68	+165	173	1.04	1.16
December	84	3.8	11.9	+248	260	1.56	1.80
January	110	3.5	16.4	+345	361	2.16	2.49
February	120	2.8	14.4	+304	318	1.90	1.98
March	64	4.8	19.1	+375	394	2.36	2.72
April	8.6	2.8	4.59	+42.4	47.0	.281	.31
May	47	2.4	7.21	+146	153	.916	1.06
June	22	1.7	6.49	-21.6	-15.1	-.090	-.10
July	77	1.8	31.7	-62.7	-31.0	-.186	-.21
August	123	1.6	32.2	-41.4	-9.2	-.055	-.06
September	75	1.5	40.7	-63.7	-23.0	-.138	-.15
The year	123	1.5	17.6	+117	135	.808	10.98

Shenango River at Sharon, Pa.

Location.- Water-stage recorder, lat. 41°13'55", long. 80°30'35", at Chestnut Street Bridge at Sharon, Mercer County, 500 feet above mouth of Pine Run. Zero of gage is 840.00 feet above mean sea level.
Drainage area.- 608 square miles.
Records available.- October 1918 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; August 1909 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 25 years (1910-35), 686 second-feet.
Extremes.- Maximum discharge during year, 3,490 second-feet Jan. 22; maximum gage height, 9.36 feet Feb. 17 (affected by ice); minimum discharge, 20 second-feet Sept. 25; minimum gage height, 2.05 feet June 16; minimum daily discharge, 26 second-feet Oct. 9.
1909-35: Maximum discharge (estimated), 25,200 second-feet Mar. 26, 1913 (gage height, 18.1 feet); minimum, 6.5 second-feet Sept. 22, 1932 (gage height, 1.63 feet).
Remarks.- Records fair. Discharge estimated for periods of ice effect, Dec. 10-16, Dec. 30 to Jan. 7, Jan. 24 to Feb. 18. Regulation from storage in Pymatuning Reservoir and from power operations upstream. Corrections for storage not included in records except in part of monthly table.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	271	72	1,590	235	150	952	208	158	46	36	45	128
2	161	70	1,660	180	140	1,130	204	184	45	36	144	81
3	97	70	1,020	145	132	1,810	190	366	41	40	560	67
4	65	133	716	126	125	1,660	177	670	48	39	462	84
5	48	271	555	128	121	1,730	158	525	55	48	206	104
6	40	316	400	140	119	1,970	145	525	54	65	273	77
7	35	246	299	165	116	1,660	137	1,430	54	61	535	49
8	29	215	240	441	115	1,520	151	1,660	51	57	456	38
9	26	180	187	1,790	150	1,120	177	1,080	47	64	356	70
10	39	158	140	2,050	230	920	187	1,050	44	51	250	222
11	64	131	110	1,520	195	1,490	174	920	40	48	187	218
12	62	123	90	1,120	170	2,550	194	758	38	47	133	155
13	61	161	86	860	160	1,930	313	704	36	74	91	95
14	48	232	85	675	370	1,450	388	580	32	95	68	52
15	37	254	90	460	1,400	1,210	336	400	32	66	119	44
16	38	250	103	324	2,300	1,020	299	302	30	56	962	33
17	37	282	174	650	1,800	800	282	243	53	50	952	29
18	36	380	320	776	1,500	610	264	190	80	49	592	84
19	54	436	364	525	1,050	540	246	151	97	43	279	120
20	61	464	770	1,070	890	630	204	123	99	69	102	148
21	56	384	722	2,740	655	788	164	106	85	93	340	93
22	51	288	605	3,090	505	860	131	95	224	99	782	52
23	50	372	550	2,000	440	675	111	86	340	223	550	32
24	40	575	565	1,300	424	615	102	76	261	195	313	28
25	29	440	560	750	710	535	89	70	164	269	134	26
26	27	316	734	460	1,900	444	80	64	111	243	65	92
27	35	257	830	375	1,560	368	73	56	80	246	60	115
28	49	212	570	310	1,120	316	75	54	58	221	57	148
29	89	254	600	255		285	78	54	44	144	84	104
30	99	515	420	210		257	106	52	39	72	80	60
31	82		320	168		229		49		53	123	

Month	Observed			Storage	Corrected for storage		
	Maximum	Minimum	Mean	(Mean)	Mean	Per square mile	Run-off in inches
October	271	26	61.8	- 21.3	40.5	0.067	0.08
November	575	70	269	+ 165	434	.714	.80
December	1,660	85	499	+ 248	747	1.23	1.42
January	3,090	126	808	+ 345	1,153	1.90	2.19
February	2,300	115	662	+ 304	966	1.59	1.66
March	2,550	229	1,035	+ 375	1,410	2.32	2.68
April	388	73	181	+ 42.4	223	.367	.41
May	1,660	49	412	+ 146	558	.918	1.06
June	340	30	80.9	- 21.6	59.3	.098	.11
July	269	36	95.2	- 62.7	32.5	.053	.06
August	962	45	301	- 41.4	260	.428	.49
September	222	26	88.3	- 63.7	24.6	.040	.04
The year	3,090	26	375	+ 117	492	.809	11.00

Sugar Run at Pymatuning Dam, Pa.

Location.- Staff gage, lat. 41°29'50", long. 80°27'55", at highway bridge at Pymatuning Dam, Crawford County, a quarter of a mile above mouth, and 1 3/4 miles northwest of Jamestown. Zero of gage is 984.59 feet above mean sea level.
Drainage area.- 9.34 square miles.
Records available.- March 1934 to September 1935.
Extremes.- Maximum discharge during year, about 240 second-feet Jan. 21 (gage height, 2.4 feet, from graph based on gage readings); no flow July 19-24.
1934-35: Maximum discharge, that of Jan. 21, 1935; no flow at times during each year.
Remarks.-Records good except those estimated for periods of ice effect, Dec. 7-15, Jan. 1, 2, Jan. 25 to Feb. 15, which are fair.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.6	1.6	82	3.2	0.7	7.8	2.0	2.2	0.5	0.2	0.1	0.3
2	1.1	1.8	15.5	2.9	.6	62	2.0	2.2	.4	.2	.1	.3
3	.8	1.7	7.6	2.6	.5	52	1.8	6.7	.4	.2	1.4	.3
4	.7	8.2	6.2	2.2	.4	23	1.6	7.0	.8	.2	.8	.4
5	.6	6.2	4.3	1.7	.4	37	1.4	5.0	.7	.2	.4	.5
6	.5	2.8	3.4	3.1	.3	32	1.5	6.0	.6	.2	1.0	.4
7	.5	2.2	3.0	7.8	.2	23	1.3	44	.7	.2	2.6	.3
8	.5	1.8	2.6	30	.2	13.3	1.4	14.9	.8	.4	1.0	.2
9	.4	2.2	2.2	79	2.2	7.3	1.6	11.4	.6	.4	.7	1.1
10	.4	1.7	2.0	33	3.9	11.0	1.6	18.0	.4	.3	.5	1.2
11	.4	2.2	1.7	12.2	2.6	57	1.3	5.5	.4	.2	.4	.7
12	.4	3.4	1.5	6.5	1.5	61	2.4	3.6	.4	.3	.4	.5
13	.3	3.6	1.4	5.7	1.3	14.5	6.7	4.1	.4	.4	.3	.4
14	.3	4.5	1.3	5.7	9.4	13.7	3.8	3.4	.3	.3	.2	.3
15	.3	3.6	1.3	3.8	120	12.2	2.6	2.2	.3	.2	.4	.3
16	.3	4.1	4.1	3.4	38	8.7	2.8	1.6	.3	.2	61	.2
17	.3	7.6	9.4	9.6	11.2	7.0	3.0	1.4	.5	.1	11.4	.2
18	.3	5.5	6.2	7.0	6.2	5.5	3.2	1.2	1.0	.1	3.2	.2
19	.3	6.5	12.2	4.1	8.4	6.2	1.9	1.1	1.2	0	1.3	.2
20	.4	7.3	16.6	33	7.0	8.4	1.6	1.0	.8	0	.8	.3
21	.4	3.6	11.0	109	5.5	14.2	1.2	.8	1.0	0	.7	.3
22	.5	2.3	9.3	31	5.5	7.9	1.1	.8	2.4	0	.6	.3
23	.5	20	8.7	8.4	5.7	7.0	1.1	.8	1.6	0	.5	.2
24	.4	9.4	10.5	4.7	6.2	6.5	1.1	.8	.9	0	.4	.2
25	.4	4.5	7.6	2.8	15.6	4.5	1.0	.7	.6	1.9	.4	.2
26	.8	2.4	18.0	2.5	44	3.6	.9	.7	.4	1.5	.3	.2
27	1.2	2.2	8.7	2.0	25	2.4	.8	.6	.4	.5	.4	.3
28	3.2	1.9	5.0	1.6	9.9	3.4	1.0	.6	.4	.5	.4	.8
29	1.4	11.6	15.6	1.3		2.8	1.1	.6	.3	.4	.4	.5
30	1.3	14.7	8.7	1.1		2.2	2.6	.7	.3	.3	.3	.4
31	1.0		3.4	.9		1.9		.6		.2	.3	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3.2	0.3	0.69	0.074	0.09
November	20	1.6	5.04	.540	.60
December	82	1.3	9.39	1.01	1.16
January	109	.9	13.6	1.46	1.68
February	120	.2	11.9	1.27	1.32
March	62	1.9	16.7	1.79	2.06
April	6.7	.8	1.91	.204	.23
May	44	.6	4.85	.519	.60
June	2.4	.3	.66	.071	.08
July	1.9	0	.31	.033	.04
August	61	.1	2.99	.320	.37
September	1.2	.2	.39	.042	.05
The year	120	0	5.69	.609	8.28

Little Shenango River at Greenville, Pa.

Location.- Water-stage recorder, lat. 41°25'15", long. 80°22'35", 1,500 feet downstream from Williamson Crossing Bridge, 1 mile northeast of Greenville, Mercer County, and 2 miles upstream from mouth. Zero of gage is 953.46 feet above mean sea level.
Drainage area.- 104 square miles.
Records available.- November 1919 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; January 1914 to August 1923, November 1925 to September 1935 in reports of Pennsylvania Department of Forests and Waters. Records prior to June 1934 obtained at Columbia Avenue Bridge 1 mile downstream.
Average discharge.- 15 years (1914-18, 1920-22, 1926-35), 135 second-feet.
Extremes.-Maximum discharge during year, about 1,280 second-feet Feb. 16 (gage height, 5.66 feet); minimum, 5.8 second-feet Sept. 24, 25 (gage height, 0.72 foot).
1919-23, 1925-35: Maximum discharge, 3,220 second-feet Dec. 1, 1927, May 3, 1929; maximum gage height, 9.60 feet, former site and datum, Feb. 26, 1926 (affected by ice); minimum discharge, 2.0 second-feet Aug. 21, 1923.
Remarks.- Records good except those for high stages and those estimated for periods of ice effect, Dec. 9-16, Dec. 30 to Jan. 7, Jan. 14, 15, Jan. 24 to Feb. 14, and for periods of missing gage record, Aug. 8-13, which are fair. Some regulation at low stages from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	35	418	70	42	149	53	49	18	9.4	11	8.7
2	42	38	487	61	42	236	53	46	18	12	11	7.7
3	30	40	174	55	43	558	50	88	16	11	51	7.1
4	25	64	122	52	44	432	48	152	22	11	34	14
5	22	119	94	51	42	447	42	109	27	9.8	22	14
6	19	89	75	50	40	493	42	119	24	11	19	12
7	17	76	66	60	41	322	40	419	22	9.4	38	8.7
8	16	61	59	200	47	281	44	508	23	9.8	55	7.7
9	15	58	51	694	70	158	52	184	22	12	50	11
10	13	48	45	669	115	156	48	216	19	11	40	22
11	14	46	36	296	85	422	42	144	18	11	32	14
12	11	60	31	157	70	840	46	92	16	11	24	13
13	11	71	30	112	60	396	80	85	14	25	19	9.9
14	11	80	31	97	105	221	72	80	16	17	15	8.3
15	12	78	34	87	873	187	60	70	14	12	11	7.7
16	9.8	74	42	86	1,020	166	59	56	12	11	29	7.1
17	11	118	103	122	337	134	56	48	12	10	28	7.1
18	15	160	96	160	179	115	56	42	23	9.0	16	10
19	13	138	102	141	154	116	48	37	34	8.7	12	7.6
20	11	138	248	257	135	155	42	34	26	8.3	11	7.1
21	14	95	171	790	109	219	37	33	24	8.4	11	8.5
22	14	70	135	1,030	107	192	32	30	90	8.0	11	7.7
23	11	112	112	308	103	140	32	28	98	12	10	6.8
24	12	142	125	115	135	155	29	27	50	19	9.4	5.8
25	14	91	111	78	222	120	28	24	32	25	9.0	6.1
26	15	87	208	60	586	96	27	24	25	39	8.0	6.8
27	24	55	175	53	353	78	27	22	16	19	7.8	7.5
28	45	50	129	48	182	72	28	23	16	12	11	11
29	53	84	168	45		68	25	19	14	24	8.5	13
30	43	169	120	43		58	43	21	13	18	7.4	8.4
31	35		85	42		55		20		12	7.9	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	70	9.8	21.5	0.207	0.24
November	169	35	84.2	.810	.90
December	487	30	125	1.20	1.38
January	1,030	42	197	1.89	2.18
February	1,080	40	191	1.84	1.92
March	840	55	233	2.24	2.58
April	80	25	44.7	.430	.48
May	508	19	91.9	.884	1.02
June	98	12	25.8	.248	.28
July	39	8.0	13.9	.134	.15
August	55	7.4	20.3	.195	.22
September	22	5.8	9.54	.092	.10
The year	1,030	5.8	87.9	.845	11.45

Pymatuning Creek near Orangeville, Pa.

Location.- Water-stage recorder, lat. 41°18'40", long. 80°28'40", 2 miles upstream from confluence with Shenango River, 3 miles southeast of Orangeville, Mercer County, and 3 miles north of Sharpsville.
Drainage area.- 169 square miles.
Records available.- October 1918 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; January 1914 to August 1923, November 1925 to September 1935 in reports of Pennsylvania Department of Forests and Waters. Records prior to June 1934 obtained at a site 1,500 feet downstream.
Average discharge.- 17 years (1914-22, 1926-35), 203 second-feet.
Extremes.- Maximum discharge during year, 1,180 second-feet Jan. 22 (gage height, 7.24 feet); minimum, 3.0 second-feet July 21 (gage height, 1.18 feet).
1914-23, 1925-35: Maximum gage height (estimated), 8.9 feet, former site and datum, Mar. 13, 1920 (discharge not determined); minimum discharge, 0.5 second-foot Sept. 25, 1933.
Maximum stage known, about 15.8 feet, former site and datum, Mar. 26, 1913 (discharge not determined).
Remarks.- Records good except those estimated for periods of ice effect, Dec. 8-17, Dec. 28 to Jan. 6, Jan. 28 to Feb. 15, Feb. 27 to Mar. 3, which are fair. Some regulation from operation of mills upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	24	469	68	34	270	51	38	11	7.3	9.0	9.0
2	22	24	370	55	34	320	48	44	9.7	6.2	9.0	8.2
3	20	21	330	46	35	530	47	75	9.7	6.2	47	8.2
4	16	36	281	42	34	673	45	113	12	5.6	41	11
5	12	38	201	40	34	860	40	104	11	24	41	15
6	9.1	41	118	40	34	860	38	115	10	35	35	11
7	7.4	49	81	50	34	785	35	338	10	23	103	9.3
8	6.1	48	60	131	37	655	37	402	10	18	133	8.2
9	5.3	44	45	444	48	512	45	392	10	12	119	12
10	4.8	39	33	570	73	402	46	412	9.7	9.3	79	24
11	4.3	35	26	655	71	460	44	381	9.7	7.6	55	29
12	4.3	32	24	594	69	641	52	392	9.0	7.4	35	26
13	4.3	34	24	467	68	830	88	381	7.9	17	22	20
14	4.5	48	24	278	130	725	114	225	7.6	9.7	15	14
15	4.3	55	26	132	700	570	103	116	7.0	6.8	11	12
16	4.3	57	30	104	935	435	92	85	6.2	5.9	192	9.0
17	3.9	70	44	142	1,040	273	84	67	8.3	4.9	360	7.6
18	8.4	72	70	180	770	168	80	51	21	4.5	292	6.8
19	37	85	119	177	558	144	75	39	21	3.8	119	6.5
20	25	87	164	321	425	147	64	31	17	3.2	47	7.6
21	16	76	180	759	250	210	53	26	17	3.4	137	7.0
22	11	64	174	985	145	217	43	21	35	4.0	190	5.6
23	8.8	107	185	970	121	196	35	18	60	11	153	5.1
24	6.8	125	196	740	138	164	30	17	56	25	79	4.9
25	7.4	104	181	606	176	130	27	15	50	67	38	4.7
26	8.8	89	235	450	452	105	23	14	40	74	21	4.5
27	9.8	79	215	205	380	87	21	13	27	108	16	5.4
28	15	64	170	100	315	75	21	12	16	69	16	7.6
29	17	74	134	55		66	21	12	12	37	12	7.9
30	19	120	100	42		59	36	11	8.6	20	11	7.6
31	21		81	37		55		11		13	9.7	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	37	3.9	11.9	0.070	0.08
November	125	21	61.4	.363	.40
December	469	24	142	.840	.97
January	985	37	306	1.81	2.09
February	1,040	34	255	1.51	1.57
March	860	55	375	2.22	2.56
April	114	21	51.1	.302	.34
May	412	11	128	.757	.87
June	60	6.2	18.0	.107	.12
July	108	3.2	20.9	.124	.14
August	360	9.0	78.9	.467	.54
September	29	4.5	10.5	.062	.07
The year	1,040	3.2	121	.716	9.75

Connoquenessing Creek at Hazen, Pa.

Location.- Chain gage, lat. 40°49'00", long. 80°14'35", at highway bridge at Hazen, Beaver County, half a mile above mouth of Brush Creek.
Drainage area.- 356 square miles.
Records available.- October 1919 to September 1921, October 1931 to September 1935 in reports of U. S. Geological Survey; June 1915 to September 1935 in reports of Pennsylvania Department of Forests and Waters.
Average discharge.- 16 years (1919-35), 477 second-feet.
Extremes.- Maximum discharge during year, 5,940 second-feet May 7 (gage height, 9.08 feet); minimum, 20 second-feet July 17 (gage height, 1.04 feet).
1915-35: Maximum gage height, 16.66 feet June 29, 1924 (discharge not determined); minimum discharge, 6.6 second-feet Sept. 12, 1932 (gage height, 0.84 foot).
Remarks.- Records good except those estimated for periods of ice effect, Dec. 9-18, Jan. 29 to Feb. 14, and for periods of missing gage-height record, Jan. 6, Feb. 22-27, which are poor. Some regulation from operation of mills upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	600	85	880	740	250	985	216	181	87	90	96	55
2	365	73	985	635	300	1,250	212	979	75	78	3,940	52
3	291	72	600	635	220	2,610	187	2,210	78	87	3,910	44
4	226	99	530	432	190	2,210	168	1,810	340	82	2,220	92
5	181	319	432	257	170	1,810	157	1,300	278	80	985	442
6	157	1,030	377	270	160	1,580	168	1,160	196	82	600	160
7	149	516	282	282	150	1,230	170	4,670	159	64	1,370	103
8	128	342	241	311	160	1,090	184	3,840	142	57	1,060	85
9	109	301	200	740	180	880	316	1,890	120	49	950	80
10	100	265	180	1,020	350	851	282	2,450	105	45	775	103
11	90	226	160	880	320	2,210	237	1,300	92	46	600	90
12	76	196	150	670	290	3,550	270	845	83	43	432	76
13	66	178	155	530	260	2,130	463	740	72	42	400	62
14	60	178	160	496	250	1,440	565	635	64	32	348	50
15	55	170	170	400	1,960	1,060	496	565	60	30	309	44
16	54	165	180	332	1,440	880	432	463	54	28	1,340	41
17	52	152	190	842	1,090	705	432	322	54	22	880	38
18	50	137	210	985	810	530	282	248	174	32	463	38
19	49	172	282	705	600	496	230	230	1,350	35	291	42
20	46	723	740	1,660	463	670	225	216	494	335	216	154
21	46	670	463	3,820	400	705	209	206	270	115	187	159
22	45	400	322	3,910	370	600	193	196	1,520	87	170	109
23	45	960	244	2,210	370	565	181	184	1,160	64	126	90
24	45	1,550	301	1,370	410	565	162	159	705	45	105	64
25	52	1,020	332	1,160	520	496	144	130	463	103	88	49
26	68	950	530	775	1,500	432	130	103	337	202	82	46
27	101	600	670	670	1,350	346	124	98	226	90	78	45
28	147	463	496	377	1,230	327	128	96	176	62	80	46
29	144	365	463	320		291	126	100	140	60	90	60
30	126	432	432	280		257	157	128	120	53	68	53
31	103		291	260		223		103		46	61	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	600	43	123	0.346	0.40
November	1,550	72	427	1.20	1.34
December	985	150	376	1.06	1.22
January	3,910	257	902	2.53	2.92
February	1,960	150	563	1.58	1.64
March	3,550	223	1,063	2.99	3.45
April	565	124	241	.677	.76
May	4,670	96	889	2.50	2.88
June	1,520	54	306	.860	.96
July	355	22	73.7	.207	.24
August	3,940	61	720	2.02	2.33
September	442	38	85.7	.241	.27
The year	4,670	22	483	1.36	18.41

Slippery Rock Creek at Wurtemburg, Pa.

Location.- Chain gage, lat. 40°51'40", long, 80°14'35", at highway bridge at Wurtemburg, Lawrence County, 1 mile upstream from mouth. Zero of gage is 812.48 feet above mean sea level.
Drainage area.- 406 square miles.
Records available.- October 1918 to September 1920, October 1931 to September 1935 in reports of U. S. Geological Survey; January 1912 to September 1935 in reports of Pennsylvania Department of Forests and Waters. Records prior to October 1922 obtained at a site half a mile upstream.
Average discharge.- 22 years (1912-32, 1933-35), 547 second-feet.
Extremes.- Maximum discharge observed during year, 4,950 second-feet Jan. 22 (gage height, 7.64 feet); minimum, 38 second-feet Oct. 18 (gage height, 2.20 feet); minimum daily discharge, 48 second-feet Oct. 18.
1912-35: Maximum gage height (estimated), 11.8 feet Dec. 14, 1927 (discharge not determined); minimum discharge, 11 second-feet Sept. 8, 1925; minimum daily discharge, 16 second-feet Sept. 8, 1925.
Remarks.- Records fair except those estimated for periods of ice effect, Dec. 9-19, Jan. 29 to Feb. 14, which are poor. Discharge estimated for days of missing gage-height record, Nov. 5, Dec. 3, July 1. Regulation from power operations upstream.

Daily and monthly discharge, in second-feet, 1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	495	158	1,030	370	320	980	303	286	128	140	444	75
2	315	156	1,290	315	340	1,170	277	322	113	111	1,420	69
3	234	143	1,100	281	280	1,920	269	1,160	120	108	3,020	67
4	190	216	771	234	230	1,920	244	1,720	166	101	2,570	82
5	158	450	567	249	200	1,720	221	1,260	169	93	1,530	142
6	143	875	429	234	190	1,820	233	2,040	185	97	1,720	139
7	126	738	315	249	180	1,440	210	3,410	196	106	1,620	108
8	109	495	249	315	210	1,220	269	3,820	196	82	1,440	97
9	100	370	210	734	250	940	433	2,410	182	88	1,220	84
10	91	298	190	1,290	400	790	433	2,350	147	86	902	118
11	89	249	180	840	360	1,680	350	1,640	120	78	1,350	115
12	83	234	180	594	320	2,810	336	1,140	125	71	865	90
13	70	234	185	429	290	2,030	515	1,020	106	88	548	76
14	65	234	190	409	290	1,350	515	1,060	101	69	350	76
15	63	234	200	389	1,960	1,100	400	940	101	64	282	82
16	65	234	210	370	2,350	865	385	685	84	67	416	60
17	56	249	240	557	1,530	720	375	503	93	69	411	59
18	48	315	300	950	902	650	322	444	201	62	341	62
19	78	389	400	620	720	580	294	360	996	78	229	66
20	59	450	567	1,280	580	790	244	294	865	78	163	153
21	66	389	472	3,500	491	790	221	273	740	60	163	166
22	61	315	429	6,800	461	685	199	260	1,720	62	145	101
23	59	623	409	2,320	438	720	185	229	1,620	60	139	82
24	61	1,030	389	1,440	503	720	179	203	1,260	87	93	80
25	56	708	450	1,060	650	580	169	185	902	399	93	56
26	63	429	708	865	1,580	491	150	175	650	497	90	59
27	102	351	804	650	1,720	400	159	159	370	218	75	57
28	174	429	594	444	1,180	380	169	156	225	156	95	54
29	234	738	450	360		360	185	175	196	370	108	88
30	234	771	472	320		326	244	153	179	315	82	78
31	185		429	310		322		136		147	76	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	495	48	127	0.313	0.36
November	1,030	143	417	1.03	1.15
December	1,290	180	465	1.15	1.33
January	6,800	234	928	2.29	2.64
February	2,350	180	676	1.67	1.74
March	2,810	322	1,041	2.56	2.95
April	515	150	283	.697	.78
May	3,820	136	934	2.30	2.65
June	1,720	84	409	1.01	1.13
July	497	60	132	.325	.37
August	3,020	75	710	1.75	2.02
September	166	54	87.4	.215	.24
The year	6,800	48	519	1.28	17.36

Miscellaneous Discharge Measurements for the year ending September 30, 1935

Stream	Location	Date	Gage height	Discharge	Drainage area	Per square mile
Delaware River Basin						
Little Lehigh Creek	One mile above mouth at Allentown	Nov. 6	1.41	124.	88.2	1.41
Jordon Creek	Two miles above mouth near Allentown	6	....	50.4	79.9	.631
Durham Creek	At Durham Furnace	6	....	20.0	29.5	.678
Tohickon Creek	Three-fourths mile below mouth of Haycock Creek near Ottsville	6	....	79.2	74.5	1.06
Monocacy Creek	At New Street Bridge, Bethlehem	7	....	50.6	49.6	1.02
do	do	Jan. 15	....	86.2	49.6	1.74
do	do	Mar. 10	....	159	49.6	3.21
do	do	May 8	....	27.8	49.6	.560
do	do	July 11	....	300	49.6	6.05
Susquehanna River Basin						
Black Moshannon Creek	At Black Moshannon School	July 30	....	26.3	....	....
Upper Little Swatara Creek	At highway bridge three-fourths mile southeast of Pine Grove	Oct. 16	1.57	27.0	34.3	.787
do	do	Dec. 12	2.15	57.3	34.3	1.67
do	do	Feb. 14	2.06a	32.8	34.3	.956
do	do	Mar. 27	1.90	58.1	34.3	1.69
do	do	Apr. 9	3.85	456	34.3	13.3
do	do	15	2.24	96.1	34.3	2.80
do	do	May 9	1.72	38.1	34.3	1.11
do	do	July 9	5.99	1,110	34.3	32.4
do	do	Aug. 13	1.33	10.1	34.3	.294
do	do	Sept. 25	1.20	4.48	34.3	.131
North Bald Eagle Creek	At Milesburg	Nov. 19	1.56b	53.0	119	.445
do	do	Jan. 29	1.97c	221	119	1.86
do	do	Mar. 26	1.42c	149	119	1.25
Big Spring Run	At Williamsburg	Feb. 8	....	1.09	....	....
do	do	Mar. 26	....	.97	....	....
do	do	July 26	....	.66	....	....
Ohio River Basin						
Cherry Tree Run	Near Rouseville	Nov. 23	....	61.2	16.1	3.80
do	do	Mar. 6	....	78.6	16.1	4.88
Youghiogheny River	At Ohiopyle	Aug. 19	1.14	578	1,065	.543
Chartiers Creek	At Main Street Bridge, Carnegie	Oct. 8	1.34	77.4	264	.293
do	do	Dec. 7	1.42	85.0	264	.322
do	do	Feb. 9	2.26	300	264	1.14
do	do	13	1.76	148	264	.561
do	do	15	3.10	669	264	2.53
do	do	Mar. 21	2.56	543	264	2.06
do	do	23	2.38	455	264	1.72
do	do	Apr. 3	1.87	244	264	.924
do	do	June 5	1.62	181	264	.686
do	do	Aug. 23	1.24	93.3	264	.353
Shenango River	At New Castle	Oct. 5	1.42	130	792	.164
do	do	Dec. 14	1.50	177	792	.223

a - affected by ice
b - staff gage
c - chain gage

Summary of run-off in second-feet per square mile, run-off depth in inches, precipitation, and per cent run-off to precipitation, for the year ending September 30, 1935

Delaware River Basin

Station	Drainage area	Run-off in second-feet per square mile													Run-off	Precipitation	Per cent
	Square miles	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Year	Depth in inches	Depth in inches	Run-off to precipitation
Delaware River at Port Jervis, N. Y.	3,076													1.82	24.73	38.65	64.0
Delaware River at Belvidere, N. J.	4,542	1.50	1.74	2.92	2.21	1.17	3.63	2.31	1.88	0.745	2.11	0.476	0.411	1.77	24.01	39.03	61.5
Delaware River at Riegelsville, N. J.	6,344	1.51	1.63	2.97	2.09	1.33	3.34	2.16	1.69	.797	2.48	.605	.542	1.77	24.03	40.05	60.0
Delaware River at Trenton, N. J.	6,796	1.60	1.65	3.01	2.09	1.39	3.34	2.17	1.69	.771	2.56	.644	.634	1.80	24.49	40.10	61.1
Lackawaxen River at West Hawley	206	1.27	1.67	2.38	1.99	1.04	3.78	2.57	2.18	.684	2.09	.462	.534	1.73	23.47	42.33	55.4
Wallenpaupack Creek at Wilsonville	228	.741	1.32	3.05	.987	1.16	3.30	2.53	1.56	.526	2.62	-.160	-.106	1.47	19.92	39.34	50.6
Bushkill Creek at Shoemakers	117	1.36	1.82	3.62	1.97	1.32	3.22	1.86	1.34	1.03	4.92	.676	.600	1.99	27.02	39.65	68.1
McMichaels Creek at Stroudsburg	64.4	1.63	1.71	4.01	1.96	1.66	2.44	1.63	.946	.651	3.60	.820	1.06	1.85	25.13	44.58	56.4
Lehigh River at Tannery	322	1.45	2.12	4.21	1.94	1.21	3.59	2.61	1.86	1.33	4.08	.857	.634	2.17	29.45	40.14	73.4
Lehigh River at Bethlehem	1,280	1.56	1.71	3.62	1.76	1.62	2.46	1.81	1.22	.931	4.05	.948	.888	1.89	25.66	42.11	60.9
Neshaminy Creek at Langhorne	210	1.09	.643	1.29	1.46	2.61	1.88	.843	.396	.277	.557	.500	1.06	1.04	14.15	37.76	37.5
Schuylkill River at Pottstown	1,147	1.84	1.48	2.98	1.69	2.14	2.30	2.13	1.02	.683	2.93	.844	.764	1.74	23.56	36.86	63.9
Schuylkill River at Philadelphia	1,893	1.71	1.27	2.67	1.62	2.33	2.27	1.88	.853	.525	2.78	.758	1.14	1.64	22.28	38.42	58.0
Little Schuylkill River at Tamaqua	42.9	1.32	2.11	4.20	1.66	1.59	2.45	2.56	1.25	1.31	5.06	1.08	.720	2.12	28.73	46.30	62.1
Perkiomen Creek at Graters Ford	279	1.16	1.20	1.85	1.68	3.04	1.94	1.14	.419	.234	2.92	.760	1.80	1.50	20.43	39.62	51.6
Crum Creek at Woodlyn	33.3	.871	.973	1.15	1.47	1.95	1.93	1.77	1.11	.880	1.12	.967	2.16	1.36	18.42	46.58	39.5
Ridley Creek at Moylan	31.9	.768	1.00	1.26	1.45	2.24	1.78	1.92	1.21	.909	1.96	.828	2.08	1.45	19.59	48.52	40.4
Chester Creek near Chester	61.1	.771	1.04	1.22	1.59	2.24	1.70	1.90	1.17	.977	1.33	.706	1.98	1.38	18.69	48.34	38.7
White Clay Creek near Newark, Del.	87.8	.663	.859	1.13	1.66	2.23	1.64	1.86	1.28	1.09	2.30	.873	2.27	1.48	20.11	48.41	41.5
Brandywine Creek at Chadds Ford	287	.878	1.05	1.52	1.37	2.01	1.83	2.14	1.34	.948	1.73	.756	1.59	1.43	19.33	47.14	41.0

Summary of run-off in second-feet per square mile, run-off depth in inches, precipitation, and per cent run-off to precipitation, for the year ending September 30, 1935

Susquehanna River Basin

Station	Drainage area	Run-off in second-feet per square mile													Run-off	Precipitation	Per cent
	Square miles	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Year	Depth in inches	Depth in inches	Run-off to precipitation
North Branch of Susquehanna River at Towanda	7,797	0.395	0.950	1.24	2.26	0.851	3.23	2.88	1.80	0.375	2.24	0.474	0.230	1.42	19.27	36.93	52.2
North Branch of Susquehanna River at Wilkes-Barre	9,960	.475	.906	1.39	2.08	.798	3.11	2.86	1.80	.416	2.04	.486	.236	1.39	18.87	36.70	51.4
North Branch of Susquehanna River at Danville	11,220	.562	.987	1.68	1.99	.812	3.17	3.03	1.93	.463	2.04	.486	.240	1.46	19.79	37.15	53.3
Susquehanna River at Harrisburg	24,100	.678	1.03	2.01	1.79	1.07	3.15	2.49	1.94	.532	1.41	.493	.237	1.41	19.12	37.32	51.2
Susquehanna River at Marietta	25,990	.738	1.02	2.02	1.71	1.11	3.14	2.51	1.88	.524	1.34	.491	.250	1.40	19.00	37.15	51.1
Towanda Creek near Monroeton	214	.326	1.20	1.80	1.12	.556	2.54	2.79	1.36	.357	.321	.149	.055	1.05	14.28	30.83	46.3
Tunkhannock Creek at Dixon	383	1.06	1.58	2.16	1.79	.872	3.46	2.45	2.16	.439	1.22	.279	.235	1.48	20.13	42.03	47.9
Wapwallopen Creek near Wapwallopen	458	.793	1.40	2.58	1.47	1.18	2.45	2.23	1.48	1.04	3.17	.607	.266	1.56	21.21	42.16	50.3
West Branch of Susquehanna River at Bower	315	.771	1.83	1.58	2.62	1.34	4.63	1.49	3.04	.422	1.80	1.12	.247	1.75	23.79	40.83	58.3
West Branch of Susquehanna River at Renovo	2,975	.434	1.26	1.38	2.56	.989	4.06	1.75	2.80	.691	1.17	.602	.222	1.50	20.40	40.94	49.8
West Branch of Susquehanna River at Williamsport	5,682	.515	1.28	1.65	2.09	.860	4.00	2.25	2.62	.679	.936	.510	.198	1.47	20.02	37.46	53.4
Clearfield Creek at Dimeling	371	.631	1.29	1.44	2.18	1.18	3.89	1.49	2.77	.367	.841	.706	.170	1.42	19.28	40.74	47.3
Driftwood Branch of Sinnemahoning Creek at Sterling Run	281	.181	1.33	1.05	2.26	.993	4.29	1.42	2.94	.719	1.33	.304	.305	1.43	19.48	43.63	44.6
North Bald Eagle Creek at Beech Creek Station	559	.574	1.15	1.64	1.63	.941	3.21	1.79	1.97	.517	.544	.399	.279	1.23	16.64	32.54	51.1
Pine Creek at Cedar Run	604	.278	1.24	1.50	1.89	.735	2.91	2.61	2.08	.570	.624	.404	.142	1.25	17.04	33.16	51.4
Lycoming Creek near Trout Run	173	.578	2.00	2.39	1.53	.601	3.30	2.68	1.98	.539	.659	.289	.145	1.40	18.97	33.88	56.0
Loyalsock Creek at Loyalsock	443	.858	2.05	2.81	1.69	1.05	3.43	2.90	2.00	.655	1.03	.558	.168	1.61	21.81	38.94	56.0
Penn Creek at Penns Creek	301	1.40	1.57	3.03	1.47	1.34	3.26	2.35	1.87	.821	.508	.281	.207	1.51	20.55	34.80	59.0
Mahantango Creek East near Dalmatia	162	.821	1.79	3.88	1.04	1.51	2.22	1.89	.809	.487	2.01	.576	.181	1.44	19.51	39.53	49.4
Frankstown Branch Juniata River at Williamsburg	291	.588	.811	1.40	1.78	1.55	3.44	1.74	2.36	.505	.643	.619	.298	1.31	17.82	38.02	46.9
Juniata River at Newport	3,354	.710	.781	2.00	1.45	1.85	2.69	1.79	1.81	.465	.666	.481	.278	1.25	16.94	36.96	45.8
Shaver Creek near Petersburg	464	.409	.927	1.78	1.88	1.36	2.93	1.31	1.64	.442	.571	.295	.128	1.14	15.50	35.88	43.2
Standing Stone Creek near Huntingdon	128	.624	.906	1.63	1.40	.938	2.55	1.52	1.92	.592	.621	.397	.260	1.12	15.18	35.65	42.6
Raystown Branch of Juniata River at Saxton	756	.398	.492	1.22	1.62	2.05	2.29	1.58	2.05	.413	.538	.718	.377	1.14	15.52	37.69	41.2
Dunning Creek at Yount	191	.432	.843	1.50	2.24	1.93	3.03	1.50	1.99	.349	.686	1.35	.352	1.35	18.34	38.74	47.3
Brush Creek at Gapsville	368	.383	.630	2.58	1.66	2.52	2.31	1.80	2.24	.288	.173	.254	.267	1.26	17.00	35.54	47.8
Great Trough Creek near Marklesburg	846	.322	.481	1.56	1.44	1.55	3.05	1.68	1.91	.499	1.08	.436	.191	1.18	16.08	37.32	43.1
Aughwick Creek near Orbisonia	174	.445	.603	2.45	1.41	2.05	1.94	1.57	1.60	.294	.315	.152	.236	1.09	14.73	36.50	40.4
Tuscarora Creek near Port Royal	214	.460	.776	2.66	1.13	1.60	2.74	2.29	1.38	.307	.827	.214	.216	1.21	16.53	36.83	44.9
Cocolamus Creek near Millerstown	572	.857	1.73	3.15	1.53	1.40	2.41	1.68	.984	.302	1.35	.201	.150	1.31	17.85	37.14	48.1
Sherman Creek at Shermandale	200	.695	1.62	3.84	1.22	1.97	2.94	2.72	1.25	.420	1.44	.258	.316	1.56	21.15	39.53	53.5

Summary of run-off in second-feet per square mile, run-off depth in inches, precipitation, and per cent run-off to precipitation, for the year ending September 30, 1935

Susquehanna River Basin

Station	Drainage area	Run-off in second-feet per square mile													Run-off	Precipitation	Per cent
	Square miles	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Year	Depth in inches	Depth in inches	Run-off to precipitation
Conodoguinet Creek near Hogestown	470	0.847	0.968	3.04	1.12	1.83	1.93	1.59	0.877	0.419	0.885	0.334	0.438	1.19	16.13	38.89	41.5
Swatara Creek at Harper Tavern	333	1.39	1.87	3.51	1.44	2.05	2.58	2.46	.826	.468	1.06	.315	2.90	1.52	20.62	41.56	49.6
West Conewago Creek near Manchester	510	1.07	.653	2.45	1.07	2.43	1.76	1.88	.722	.208	.153	.077	.129	1.04	14.14	33.45	42.3
Codorus Creek at Spring Grove	74.3	1.16	.670	1.37	1.03	1.97	1.60	1.82	1.00	.437	.233	.160	.275	.970	13.18	30.80	42.8
South Branch of Codorus Creek near York	117	1.32	.872	1.40	1.23	1.88	1.64	1.92	1.11	.672	.432	.272	.515	1.09	14.92	31.39	47.5
Conestoga Creek at Lancaster	322	1.76	1.18	1.86	1.31	2.10	1.93	1.80	.941	.562	.686	.388	.435	1.24	16.86	33.80	49.9
Muddy Creek at Castle Fin	133	.940	.970	1.56	1.24	1.86	1.80	2.50	1.44	1.14	1.26	.732	.955	1.36	18.49	39.05	47.3

Summary of run-off in second-feet per square mile, run-off depth in inches, precipitation, and per cent run-off to precipitation, for the year ending September 30, 1935

Ohio River Basin

Station	Drainage area	Run-off in second-feet per square mile													Run-off	Precipitation	Per cent
	Square miles	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Year	Depth in inches	Depth in inches	Run-off to precipitation
Allegheny River at Larabee	541	0.139	1.30	0.948	2.42	0.932	3.45	1.83	2.10	0.510	1.23	0.521	0.325	1.32	17.85	34.95	51.1
Allegheny River at Franklin	5,982	.158	1.22	1.18	2.91	1.37	3.66	1.41	1.97	.758	.860	.492	.302	1.36	18.50	39.31	47.1
Allegheny River at Parkers Landing	7,671	.172	1.21	1.13	2.79	1.40	3.65	1.32	2.14	.770	.832	.534	.306	1.36	18.46	39.38	46.9
Ohio River at Sewickley	19,500	.381	.991	1.10	2.81	1.75	3.63	1.63	2.62	.777	.702	1.37	.558	1.53	20.78	43.06	48.3
Brokenstraw Creek at Youngsville	304	.119	.691	1.11	3.32	1.61	3.49	.980	1.60	.944	1.29	.375	.368	1.33	18.03	42.98	41.9
Tionesta Creek at Nebraska	481	.194	1.51	1.18	2.65	1.71	3.71	1.10	2.59	1.16	1.51	.491	.205	1.51	20.43	42.04	48.6
Oil Creek at Rouseville	300	.135	.733	1.29	2.81	1.71	3.50	.887	1.73	.900	.683	.284	.254	1.24	16.90	39.77	42.5
French Creek at Carters Corners	208	.076	.755	1.89	3.39	2.55	3.96	1.09	1.40	.582	.760	.242	.374	1.42	19.30	41.36	46.7
French Creek at Saegertown	629	.070	.641	1.53	3.16	2.15	3.71	.933	1.37	.677	.696	.264	.299	1.29	17.53	38.01	46.1
French Creek at Utica	1,028	.100	.757	1.46	2.92	1.84	3.32	.806	1.29	.534	.540	.262	.230	1.17	15.93	36.42	43.7
Cussewago Creek near Meadville	90.2	.057	1.24	1.60	3.02	2.34	2.92	.549	1.25	.327	.235	.064	.100	1.14	15.44	34.12	45.3
Sugar Creek at Sugarcreek	166	.131	.849	1.10	2.16	1.54	2.86	.765	1.33	.614	.399	.291	.142	1.01	13.78	36.78	37.5
Clarion River near Piney	951	.287	1.58	1.06	2.68	1.32	5.15	1.16	4.81	.933	1.11	.620	.274	1.76	23.89	41.17	58.0
Red Bank Creek at St. Charles	528	.295	1.47	1.07	3.12	1.49	4.08	.829	3.05	.881	1.42	.983	.473	1.60	21.78	46.78	46.6
Mahoning Creek near Dayton	321	.380	1.94	1.78	3.67	1.64	4.69	1.27	3.61	.804	2.20	2.36	.720	2.10	28.54	44.90	63.6
Crooked Creek near Ford City	280	.600	1.44	1.07	3.03	1.56	4.00	1.06	2.50	.364	.205	1.37	.291	1.46	19.86	41.39	48.0
Stony Creek at Johnstown	467	.623	1.12	1.55	3.20	1.78	4.09	1.54	2.82	.649	1.03	2.34	.522	1.78	24.18	45.02	53.7
Kiskiminetas River at Avonmore	1,723	.862	1.34	1.56	3.20	1.77	4.47	1.60	3.09	.478	.886	2.25	.388	1.84	24.88	44.08	56.4
Blacklick Creek at Blacklick	390	.928	1.52	1.65	3.29	1.58	4.79	1.38	3.36	.331	1.04	1.29	.279	1.80	24.40	41.35	59.0
Loyalhanna Creek at New Alexandria	265	.653	1.12	1.26	3.32	1.98	4.42	1.74	2.95	.392	.460	3.27	.237	1.82	24.78	45.36	54.6
Monongahela River at Charleroi	5,213	.274	.749	1.17	3.12	2.32	3.62	2.44	3.31	1.06	.622	2.11	1.04	1.82	24.73	49.47	50.0
South Fork of Tenmile Creek at Jefferson	180	.077	.213	.311	1.92	1.95	2.19	1.23	2.72	.146	.063	1.04	.271	1.01	13.69	37.90	36.1
Youghiogheny River at Connellsville	1,326	.540	1.39	1.66	3.75	2.48	3.56	2.34	3.45	.989	.734	2.51	.852	2.03	27.46	45.44	60.4
Youghiogheny River at Sutersville	1,715	.570	1.24	1.45	3.45	2.60	3.51	2.14	3.37	.864	.691	2.45	.743	1.93	26.13	43.96	59.4
Casselman River at Markleton	382	.332	1.27	1.53	3.31	2.41	3.27	1.94	3.29	.613	.419	1.95	.723	1.75	23.83	45.07	52.9
Big Piney Run near Salisbury	24.5	.386	.845	1.43	3.00	2.54	3.04	2.25	2.97	.776	.332	1.28	.967	1.65	22.37	46.24	48.4
Laurel Hill Creek at Ursina	121	.609	2.43	2.42	4.80	3.17	5.25	2.36	3.94	.735	.631	3.44	.646	2.55	34.49	44.29	77.9
Turtle Creek at Trafford	54.8	.520	.650	.801	2.57	2.54	3.65	1.21	2.23	.447	.075	1.38	.135	1.35	18.31	35.34	51.8
Beaver River at Wampum	2,235	.180	.411	.591	1.31	1.24	1.76	.347	1.09	.226	.256	1.33	.164	.743	10.09	34.26	29.5
Shenango River at Pymatuning Dam	167	-.018	1.04	1.56	2.16	1.90	2.36	.281	.916	-.090	-.186	-.055	-.138	.808	10.98	35.12	31.3
Shenango River at Sharon	608	.087	.714	1.23	1.90	1.59	2.32	.367	.918	.098	.053	.428	.040	.809	11.00	33.58	32.8
Sugar Run at Pymatuning Dam	9.3	.074	.540	1.01	1.46	1.27	1.79	.204	.519	.071	.033	.320	.042	.609	8.28	30.47	27.2
Little Shenango River at Greenville	104	.207	.810	1.20	1.89	1.84	2.24	.430	.884	.248	.134	.195	.092	.845	11.45	32.31	35.4
Pymatuning Creek near Orangeville	169	.070	.363	.840	1.81	1.51	2.22	.302	.757	.107	.124	.467	.062	.716	9.75	34.03	28.7
Connoquenessing Creek near Hazen	356	.346	1.20	1.06	2.53	1.58	2.99	.677	2.50	.860	.207	2.02	.241	1.36	18.41	34.85	52.8
Slippery Rock Creek at Wurtemburg	406	.313	1.03	1.15	2.29	1.67	2.56	.697	2.30	1.01	.325	1.75	.215	1.28	17.36	37.81	45.9

Summary of run-off in second-feet per square mile, run-off depth in inches, precipitation, and per cent run-off to precipitation, for the year ending September 30, 1935

Potomac River Basin

Station	Drainage area	Run-off in second-feet per square mile													Run-off	Precipitation	Per cent
	Square miles	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Year	Depth in inches	Depth in inches	Run-off to precipitation
Evitts Creek in Bedford Valley	30.2	0.210	0.421	0.838	1.52	1.79	1.78	1.74	2.02	0.411	0.283	0.513	0.397	0.990	13.43	35.71	37.6
Licking Creek near Sylvan	158	.499	.452	2.42	1.29	2.26	1.87	1.76	1.41	.274	.185	.133	.316	1.06	14.48	35.43	40.9

Precipitation on Pennsylvania for 48 years ending September 30, 1935.

Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Year
1887-88	1.70	1.92	3.56	4.19	2.50	3.55	2.52	4.24	3.04	3.45	7.05	4.34	42.56
1888-89	4.02	3.37	3.14	3.54	1.96	2.90	4.50	5.91	5.43	6.30	3.24	5.05	49.36
1889-90	3.85	6.72	2.77	3.04	4.32	5.15	3.46	6.71	3.42	3.52	5.76	4.57	53.29
1890-91	5.87	1.49	3.97	3.64	4.61	5.10	2.08	2.12	4.50	6.32	5.09	2.39	47.18
1891-92	3.06	2.65	4.09	4.77	1.75	4.14	2.04	5.70	5.64	3.93	3.77	2.81	44.35
1892-93	.72	4.34	1.69	2.85	5.92	2.52	4.74	5.54	3.12	3.15	4.50	2.67	41.76
1893-94	3.26	2.93	3.06	2.29	3.53	1.63	3.62	8.38	2.57	2.32	1.84	6.30	42.23
1894-95	4.26	2.50	3.95	4.17	1.22	2.31	3.76	2.68	3.50	3.24	3.23	1.71	36.53
1895-96	1.99	2.48	3.22	1.43	4.90	4.51	1.75	2.35	4.64	6.38	2.22	4.32	41.70
1896-97	3.19	3.55	1.20	2.15	3.28	3.22	3.30	5.24	3.38	6.26	3.17	2.18	40.12
1897-98	1.32	5.28	3.95	4.25	2.23	4.31	2.93	5.11	2.79	3.36	6.60	1.70	43.33
1898-99	5.20	4.03	2.93	3.05	4.05	4.07	1.76	3.32	3.51	3.91	4.01	4.70	45.89
1899-00	1.55	2.66	3.04	2.64	4.22	3.61	1.57	2.79	3.60	4.86	3.33	1.77	35.64
1900-01	2.74	4.10	2.08	2.22	.96	4.14	5.41	5.56	3.47	3.38	6.81	3.39	44.76
1901-02	1.23	2.56	5.91	2.80	3.99	3.93	3.56	1.96	5.97	6.04	2.62	4.66	45.28
1902-03	4.64	1.53	5.54	3.31	4.49	4.52	3.53	1.67	6.53	5.36	5.29	2.09	48.50
1903-04	4.64	2.18	2.66	3.55	2.41	4.29	3.45	3.78	4.06	4.68	4.36	3.37	43.43
1904-05	2.87	1.14	2.48	3.70	1.70	3.86	2.84	2.59	4.39	4.87	5.71	3.41	39.56
1905-06	4.23	2.47	3.57	2.53	1.70	4.46	3.13	3.23	5.43	4.31	5.62	2.46	43.14
1906-07	4.46	1.48	3.97	4.36	1.91	4.26	2.64	3.08	4.99	3.84	2.94	6.37	44.30
1907-08	3.16	3.60	4.30	2.68	4.65	4.76	3.51	6.28	2.36	4.81	3.22	1.60	44.93
1908-09	1.95	.90	2.86	2.92	4.84	3.07	5.39	2.90	4.48	2.14	2.31	2.27	36.03
1909-10	2.27	1.40	3.39	5.55	3.59	.56	5.07	3.38	4.31	2.42	2.61	4.49	39.04
1910-11	1.91	2.45	2.65	3.54	2.27	2.57	3.79	1.97	4.71	2.81	7.63	5.29	41.59
1911-12	4.83	2.84	3.27	1.92	2.20	5.05	4.39	3.15	3.36	5.29	5.02	5.57	46.39
1912-13	2.74	2.17	3.27	4.95	1.84	5.27	3.82	3.86	2.26	4.16	2.69	3.28	40.31
1913-14	5.44	3.05	2.63	3.37	2.73	2.61	4.66	3.34	3.71	4.19	3.85	.99	40.62
1914-15	2.35	1.76	4.63	5.56	3.90	1.28	1.92	4.16	4.00	5.23	6.71	2.56	44.11
1915-16	2.65	2.18	4.06	2.42	3.08	4.12	3.65	3.19	6.14	4.45	2.57	3.77	42.28
1916-17	2.25	2.27	3.07	3.60	1.46	3.68	2.08	3.39	5.38	4.33	6.69	2.31	40.51
1917-18	6.38	.63	1.73	3.51	2.46	2.34	4.53	5.04	3.46	3.05	4.12	3.97	41.27
1918-19	3.17	2.03	3.38	2.53	2.23	3.57	2.70	5.80	3.90	5.90	5.43	2.07	42.71
1919-20	4.77	5.35	2.61	2.47	2.44	2.83	4.39	2.02	4.97	4.37	4.66	3.99	44.87
1920-21	1.67	3.54	3.23	2.58	2.59	3.33	3.11	3.93	3.12	4.13	3.83	4.68	39.79
1921-22	2.16	5.75	2.59	2.26	1.99	4.37	3.17	3.21	5.11	3.68	3.14	1.48	38.91
1922-23	2.51	1.21	2.75	4.26	2.16	2.49	2.94	3.50	2.73	4.24	3.10	3.55	35.44
1923-24	2.38	2.83	4.99	4.34	2.94	2.33	4.15	5.71	5.57	3.42	3.73	6.44	49.38
1924-25	.28	1.54	2.13	3.53	2.16	2.56	2.32	3.49	3.04	5.57	2.28	2.80	31.70
1925-26	4.83	3.56	1.72	2.80	4.06	1.91	2.03	1.78	3.63	3.82	5.69	5.81	41.64
1926-27	4.51	4.49	2.53	2.90	3.48	2.61	3.52	4.14	3.72	4.97	4.12	2.08	43.12
1927-28	6.40	4.95	4.41	2.08	3.42	3.24	5.50	2.23	7.96	5.44	4.60	2.33	52.56
1928-29	1.78	2.32	1.16	3.37	2.87	2.69	6.12	4.31	3.56	2.81	2.52	3.71	37.72
1929-30	5.59	3.39	2.77	2.25	2.69	3.03	2.71	3.03	4.20	2.23	1.47	2.45	35.81
1930-31	.99	1.48	2.29	1.46	1.98	2.96	3.33	5.28	3.71	5.28	4.01	3.15	35.92
1931-32	1.83	1.52	2.85	4.51	1.64	4.41	1.71	3.69	3.15	3.39	2.82	1.45	32.97
1932-33	5.31	4.75	2.19	2.00	2.30	5.33	4.49	5.36	2.58	4.26	7.61	4.66	51.34
1933-34	1.91	1.55	2.88	2.54	1.31	2.96	3.06	2.51	3.64	4.01	4.94	6.58	37.89
1934-35	1.46	3.61	2.55	3.08	2.67	2.62	2.56	3.00	4.22	5.63	3.91	3.51	38.32
Mean	3.17	2.84	3.12	3.20	2.87	3.47	3.40	3.92	4.10	4.31	4.22	3.50	42.12

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